

# **DRAFT**

# **ENVIRONMENTAL**

# **ASSESSMENT**

## **KILPATRICK ROADSIDE MENAGERIE**

## **APPLICATION**

**APRIL 17, 2003**

**Montana Fish, Wildlife & Parks**  
**Region I**  
**490 North Meridian Road**  
**Kalispell, Montana 59901**

*Flathead*  
*Game Farm*

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## **SUMMARY**

### **ENVIRONMENTAL ASSESSMENT KILPATRICK ROADSIDE MENAGERIE**

#### **INTRODUCTION**

A wild animal, as defined by Montana law, refers to any animal that is wild by nature as distinguished from the common domestic animal, whether the animal was bred or reared in captivity. An individual in Montana wishing to possess one or more wild animals in captivity for the purpose of exhibition or attracting trade is required by law to have a roadside menagerie license issued by the Montana Department of Fish, Wildlife & Parks (MFWP). In evaluating an application for a roadside menagerie, the department is required under the Montana Environmental Policy Act (MEPA) to evaluate the project to:

- Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations,
- Ensure for all Montana safe, healthful, productive, and aesthetically and culturally pleasing surroundings,
- Attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences,
- Protect the right to use and enjoy private property free of undue government regulation,
- Preserve important historic, cultural, and natural aspects of our unique heritage and maintain, whenever possible, an environment that supports diversity and variety of individual choice;
- Achieve a balance between population and resource use that will permit high standards of living and a wide sharing of life's amenities; and
- Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

#### **PUBLIC PARTICIPATION**

Public involvement in the Environmental Assessment (EA) process includes steps to identify and address public concerns. Although not required, a public scoping meeting was held on March 26, 2003 at the MFWP Region I Office in Kalispell. This meeting helped define the issues described in this EA. The Draft EA will be available for public review and comment from April 18, 2003 until 5:00 pm May 6, 2003 from the Region I MFWP office in Kalispell (490 North Meridian Road; phone 406-752-5501). Comments regarding this EA should be submitted to MFWP at the location specified below.

Ms. Nancy Ivy  
Montana FWP, Region I  
490 North Meridian Road, Kalispell 59901  
Email comments: nivy@state.mt.us.

## **RATIONALE AND HISTORY**

In 1991 Mr. Kilpatrick applied to be licensed by the Montana Department of Fish, Wildlife & Parks to operate a "drive-through" roadside menagerie for the display of black bears. Montana statutes make no provision for a "drive-through" roadside menagerie. An environmental assessment based on that initial application had been completed in compliance with MEPA in 1991. The present environmental assessment is being conducted to assess a "re-licensure" of the facility that would include the addition of brown bears as well as expansion of the facility from 8 to 15 acres. The issue concerning the addition of brown bears to the facility is not new. That issue, as well as the operational history of the facility is information important to the conduct of the current environmental assessment in evaluating current conditions and potential impacts arising from licensure of the facility.

Mr. Kilpatrick's original roadside menagerie permit was granted in July of 1991 with 11 stipulations that were added in order to tailor the concept of a "drive-through" roadside menagerie to existing Montana statutes. Those stipulations, agreed to by Mr. Kilpatrick, had been included by MFWP to mitigate concerns associated with the unique circumstances under which Mr. Kilpatrick intended to operate the facility. Shortly after acquiring black bears for the facility, one of the black bears died of rabies. At that time, a health-monitoring plan was established for the Kilpatrick facility by the Montana Department of Livestock to assist in the evaluation of any health risks to the remaining bears as well as to humans.

Mr. Kilpatrick informally requested the addition of costal brown bears to his facility in 1993 and the request was refused. At that time, denial for the inclusion of brown bears was based upon the original stipulation on his license specifying black bears only and upon concerns with the possession of brown bears on that site and under the existing fencing conditions. Mr. Kilpatrick then filed a complaint against MFWP in the Lewis and Clark County District Court for declaratory judgment and an application for a writ of injunction. That case was decided in August of 1993 and the department's authority to regulate

Mr. Kilpatrick's drive-through roadside menagerie and implement stipulations prohibiting brown bears was upheld by District Judge Jeffery Sherlock. Mr. Kilpatrick did not appeal the judgment.

In 1993 and 1994, on site inspections indicated that existing stipulations were not being adhered to and Mr. Kilpatrick was directed to come into compliance with those stipulations. Mr. Kilpatrick was out of compliance based on his failure to sterilize or neuter the bears that were at the facility as well as his failure to maintain the fences according to stipulated requirements.

In 1996, Mr. Kilpatrick once again attempted to import brown bears to his facility and that import request was denied. In April of 1997, a black bear belonging to Mr. Kilpatrick was killed by a neighboring landowner after it had escaped the confines of the facility. Mr. Kilpatrick was issued a citation for egress of the bear. Follow up inspections after egress of the black bear resulted in Mr. Kilpatrick coming into compliance with the requirements of his license

In 1999, MFWP received information that Mr. Kilpatrick had obtained brown bears at his drive-through bear facility. A dispute arose between Mr. Kilpatrick and MFWP over licensure in 1999 when department personnel were not allowed to conduct a facility inspection as required by statute. Mr. Kilpatrick had obtained brown bears and was displaying them at his facility without MFWP authorization. An administrative process was initiated in 1999 to revoke Mr. Kilpatrick's roadside menagerie license. A final revocation decision was made by the department in May of 2001 and that permit revocation was served on Mr. Kilpatrick in June of 2001. A district court revocation hearing was scheduled in August of 2001 and District Court Judge Stewart Stadler directed that mediations take place between Mr. Kilpatrick and MFWP to reach a solution on licensure. Mediation took place in March of 2002 resulting in a proposed "interim agreement" written up by MFWP that would have allowed Mr. Kilpatrick to retain the brown bears temporarily if housed under conditions consistent with other licensees in Montana who also possess brown bears. During that interim period, MFWP would have agreed to conduct an environmental assessment to evaluate re-licensure of the facility with the addition of brown bears. Mr. Kilpatrick did not sign that interim agreement and continued to operate his drive-through facility during the 2002 season.

In February of 2003, the department obtained a temporary restraining order from the District Court to prevent Mr. Kilpatrick from operating his drive-through facility. That temporary restraining order was granted by District Court Judge Stewart Stadler and the department was instructed to conduct an environmental assessment evaluating a re-licensure of the facility to include the possession of brown bears. The following environmental assessment represents that effort by MFWP. The effort evaluates various alternatives for operation of the drive-through menagerie and the potential impacts that operation under the various conditions may have on the environment.

## ENVIRONMENTAL ASSESSMENT SUMMARY

### Proposed Action and Alternatives

This Environmental Assessment (EA) evaluates the potential impacts from four alternative action, A through D. Alternative A is the Proposed Action, based upon Mr. Kilpatrick's application. Alternative D is the No Action alternative, under which no license would be issued. All four alternatives are summarized below.

#### ALTERNATIVE A – Proposed Action:

MFWP received an initial application dated March 17, 2003 from Russell Arnold Kilpatrick to operate a roadside menagerie in Flathead County, Montana. The roadside menagerie is located approximately 1 mile north of Coram, Montana. While originally permitted for an 8-acre area, the menagerie now occupies an area of approximately 15 acres in Tracts 2, 3, and 3F of the NW1/4 SW1/4 of Section 21, T31N R19W. The permit application specifies that the menagerie would contain 5 black bears (*Ursus americanus*) and 5 brown bears (*Ursus arctos*).

Under Alternative A, black bears and brown bears would be free to roam through various subunits within the menagerie. A perimeter fence consisting of 6 foot high wire mesh with an additional 2 feet of electrified elements at the top and electrified elements at the bottom surrounds the menagerie. Within the menagerie, low electrical fences (c.a., 3 feet high) are intended to restrict the bears to various areas of the menagerie. Visitors are able to travel through the menagerie in automobiles and view the free-ranging bears. One segment of the motor path has low electrical fences on either side intended to prevent bears from accessing vehicles. On this segment of the motor path visitors are able to roll down their car windows while observing bears.

Bears are socialized with humans and conditioned to avoid automobiles and fences. These training procedures are implemented at the menagerie by Mr. Kilpatrick and several volunteer trainers. Bears are fed a variable diet of dog food and vegetables, and sometimes fruit. The diet is supplemented occasionally with fish or fish pellets, but rarely are the bears fed meat. Vitamins and minerals are added to the diet. Food is dispersed daily throughout the compound at unpredictable locations to facilitate bear foraging activity. Food is prepared and stored in a secured building outside of the perimeter fence.

Veterinary care is provided by a licensed veterinarian. Bears receive an annual physical exam. Other veterinary care is provided on an as-needed basis. The general health of the bears is inspected daily by Mr. Kilpatrick and other trainers at the site. Mr. Kilpatrick will treat minor injuries. Bear fecal material is removed from the compound by menagerie staff on a daily basis to eliminate unpleasant odor and minimize the potential for disease transmission (e.g., intestinal parasites). Required Stipulations included

with the initial permit in 1991 apply to Alternative A, with the exception of allowing for brown bears. Two more stipulations were applied as a result of this EA analysis.

**The stipulations appended to the original 1991 permit are as follows:**

1. Black bear only – applies only to Alternative C.
2. All bears must be sterilized.
3. All bears must be tattooed with a unique code.
4. Food storage must be in odor-proof containers as per USDA APHIS rules.
5. A veterinary-care plan must be developed and implemented, including descriptions of specific vaccination schedules.
6. No road-killed ungulates may be in the feeding program.
7. All provisions of the roadside zoo and menagerie regulations apply, except for the caging requirements (12.6.1302).
8. Fencing requirements:
  - a. Backup fence energizer, 12-volt system, deep cycle battery.
  - b. Warning signs adequate to protect public if electrical fence system approached from outside of park.
9. Additional fencing requirements (in 1991 these were identified as recommendations):
  - a. Enhance existing fence per recommendations (as per memo from Mike Madel of 6/14/91; see Appendix B), or
  - b. Develop outside perimeter fence and use trained dogs to minimize or prevent bear escapement or entry and human entry or injury.
10. Permit review – annually with revocation rights.
11. Escaped bears – owner liable for damage and/or expenses incurred in capturing escaped bears.



Stipulation #9 as per the Madel Memo included 8 issues concerning modifications to the perimeter fence to provide containment of the captive black bears through modifications to the electric wires and the 2 foot "barbed wire" which topped the 6 foot mesh fence providing for the exterior perimeter fencing.

**Additional Required Stipulations:**

12. Report ingress of any wild bears or egress of captive bears to the Montana DWP immediately. The report must contain the probable reason why or how ingress/egress occurred.
13. Remove bear fecal matter on a daily basis. Collected fecal material should be stored odor-proof containers until removal from the site and disposed at a site isolated from surface water and groundwater. Disposal must meet county solid waste regulations.

**ALTERNATIVE B – Black bears free-ranging as originally permitted in 1991, brown bears confined per ARMs.**

Under Alternative B, Mr. Kilpatrick would be authorized to operate a roadside menagerie as a drive-through facility. Black bears would be permitted to be free ranging within the enclosed compound as per the original permit conditions and stipulations (see Alternative A). Alternative B would allow for Mr. Kilpatrick to possess and display brown bears according to the conditions specified by the Administrative Rules of Montana (ARM) 12.6.1301 – 12.6.1309, where brown bears would be confined at all times in cages and additional fencing would be installed to prevent the public from approaching the bears. Fencing design would be consistent with designs used at other facilities in Montana holding brown bears; such as the Grizzly and Wolf Discovery Center in West Yellowstone, Montana, Montana Wildlife Education Inc. in Bozeman, Montana, and Triple D Game Farm in Kalispell, Montana. Those designs include 10 to 12 foot 9 gauge wire fences or cement fences supplemented with electric wires in conjunction with "viewing dry moats" which provide public viewing across a 12 foot deep dry moat. Bears would be fed a diet similar to that proposed in Alternative A. Black bear could be fed by placing food at unpredictable locations with the menagerie, while brown bears would be fed within their cages. Veterinary care would be similar to that proposed under Alternative A. Animal socialization, conditioning and training would be modified as needed by the applicant. All Required Stipulations apply to Alternative B, with the exception of allowing for brown bears.

**ALTERNATIVE C – Strict adherence to conditions of the original permit issued in 1991 and no brown bears.**

Under Alternative C, Mr. Kilpatrick would be authorized to operate a roadside menagerie as a drive-through facility for black bears only on a 15 acre facility, while adhering to Required Stipulations listed under Alternative A.

In 1991 Mr. Kilpatrick applied for a Roadside Zoo and Menagerie Permit to operate a drive-through bear park on an 8-acre parcel of land approximately one mile north of Coram, Montana. Black bears were to be free ranging within an enclosed compound, where visitors could drive through the compound and view the bears. A permit was granted with accompanying stipulations (listed below). The stipulations were added to the conditions of the permit as a means of allowing Mr. Kilpatrick to operate outside of the conditions specified in the Administrative Rules of Montana (ARM), Sub-Chapter 13 – Roadside Zoo Regulations, and provide for the safety of staff, visitors, and captive and wild bears.

Bears would be fed a diet similar to that proposed in Alternative A, with food being placed at unpredictable locations with the menagerie. Veterinary care would be similar to that proposed under Alternative A. Animal socialization, conditioning and training would be modified as needed by the applicant.

#### **ALTERNATIVE D – No Action:**

A No Action alternative is evaluated in this EA. Under the No Action Alternative, MFWP would not issue a license the Kilpatrick Roadside Menagerie. Therefore, no bears would be placed on the property. Implementation of the No Action Alternative would not preclude other activities allowed under local, state and federal laws to take place at the menagerie site.

### **PURPOSE AND NEED OF THE PROPOSED ACTION**

The Kilpatrick Roadside Menagerie is a private commercial enterprise intended to provide an opportunity for the public to view bears in a natural-like setting. This facility is intended to allow people to learn about bear behavior, feeding habits, resting patterns and social interactions.

### **AFFECTED ENVIRONMENT**

The proposed Kilpatrick Roadside Menagerie is located approximately one mile north of Coram, Montana (Figure 2). The property is bordered on the east by Highway 2 and County right-of-way, and by private land on the west, south and north (Figure 1). Highway 2 is the western gateway to Glacier National Park, which is located a few miles north of Coram. The Middle Fork of the Flathead River is located approximately 1.5 miles southwest of the facility. Most of the surrounding mountains are forested and managed by the Flathead National Forest.

## **Land Resources**

The menagerie is situated on glacial moraine with gentle kettle topography. Soils at the site are classified as Dystric Eutrochrepts and are present on kames and kettles or terraces with the lower soil members forming in glacial till. Soils and substrata contain 50 to 80 percent rounded rock fragments. These soils are mantled by volcanic ash-influenced loess and are highly productive if soil surface layers are not displaced or removed. These soils have moderate erosion potential and sediment delivery is low.

## **Water Resources**

Several small, concrete-lined ponds are located in the drive-through menagerie enclosure. Water is pumped into the ponds from the on-site well and overflows onto the surrounding soil. The overflow infiltrates into the highly-permeable deposits of sand and gravel that underlie the site. Precipitation onto the site also reportedly rapidly infiltrates these deposits, such that surface water drainage is negligible. No portion of the site lies in the 100-year floodplain. Potable water for residences near the site is obtained from private wells. Public water supply wells are located at the campgrounds located immediately north and south of the site. Well records indicate there are approximately 74 wells within ½-mile of the site. The direction of groundwater flow in the site vicinity is not documented, but is likely west or southwest toward the Flathead River.

## **Vegetation Resources**

Approximately 90% of the site is forested, with a past history of logging. Most trees at the site are less than 12-inches in diameter. The forested habitat in this area is dominated by lodgepole pine, with a few Douglas fir, birch, aspen and black cottonwood. Woody undergrowth consists of western snowberry, bearberry, Oregon grape, buffaloberry, common juniper, and buckbrush. Few grasses and forbs were apparent during a site visit in late March 2003. Spotted knapweed occurs in the area and is picked when found at the menagerie (Kilpatrick 2003). A search of the Montana Natural Heritage Program database yielded no known occurrences of plant species of special concern in the immediate vicinity of the menagerie.

## **Wildlife Resources**

Big game in the area includes white-tailed deer, mule deer, moose, elk, black bear, and mountain lion. Grizzly bear, gray wolf, Canada lynx and bald eagle are federally-threatened species that occur in the area. However, grizzly bear is the only threatened species likely to inhabit the immediate vicinity of the menagerie. The menagerie is approximately 2 miles from public land classified as Management Situation I (MSI) habitat. In MSI habitat the needs of grizzly bear are given priority over other management considerations. The site is also located in a relatively narrow, highly-used animal-movement corridor between the Bob Marshall Wilderness Complex, Glacier National Park and the surrounding Flathead National Forest. Also, there is a large resident grizzly bear population in and immediately adjacent to the corridor. While there is a large population of grizzly bears in the area, there is a larger and more extensive population of black bears. Human development along U.S. Highway 2, within the movement corridor, has created a situation where human-bear conflicts are common. These conflicts act to increase bear mortality.

## **Human Environment**

The site is located on three tracts adjoining US Highway 2 and is predominantly forested. Many residences, a campground, a tourist resort, and other commercial establishments are located nearby. Noise is produced by traffic along Highway 2. The area is zoned as a scenic corridor, which primarily regulates signage. Taxes are assessed on the property, but the menagerie does not hire paid employees. No sites of historic or cultural interest have been identified in the immediate vicinity. The area is accessible to wild game, but based on the proximity of residences and Highway 2, existing hunting and recreational opportunities near the site are limited.

The menagerie is located in an area that is important bear habitat and frequently used by both black and grizzly bears. Human development along Highway 2 creates an environment conducive to attracting bears searching for food. Bears can become habituated to humans and human-derived food sources, leading to frequent human-bear interactions and increased risk to human safety. MFWP is actively working with residents, businesses and local communities to prevent or minimize sources of food and refuse that attract bears. Bears can be reservoirs of a number of diseases transmissible to humans, including viral, bacterial, and parasitic diseases.

## **ENVIRONMENTAL CONSEQUENCES**

Only primary resources that have potential adverse effect from the Alternatives A (Proposed Action), B, or C are summarized in this section. A detailed discussion of environmental consequences for all assessed resources is contained in *Part II* of this EA.

## **Land Resources**

Regardless of the Alternative (A, B, and C), the roadside menagerie should have only minor impacts to land and soil resources. The primary impacts would be due to fence construction activities and trampling and compaction of the soil surface layers by the bears. These impacts can be mitigated by revegetating disturbed areas and rotating bear use throughout the menagerie and allowing vegetation in rested subunits to recover.

## **Water Resources**

Because of the mild topography and high permeability of the soils, increased runoff and erosion problems from facility construction and maintenance activities are unlikely, regardless of the Alternative (A, B, C). It is possible that accumulations of large amounts of animal excrement could affect ground water quality. The applicant reports that standard operating practice is to remove fecal matter from the enclosure on a daily basis. This practice removes potential sources of nutrient contamination to water resources. It is important that the applicant maintains that practice and store collected animal waste in odor-proof containers until removed from the site for proper disposal.

## **Vegetation Resources**

The site provides little natural food for bears. Consequently, an artificial feeding program is implemented at the menagerie Under Alternatives A, B, and C. Over time, foraging activities of bears could alter the vegetation composition and productivity, and when combined with frequent trampling of vegetation may result in the loss of vegetation in high-use areas. Continual disturbance of the understory could result in alteration of the existing plant community and facilitate invasion by noxious weeds. Mitigation measures include rotating bear utilization areas to allow disturbed vegetation to recover, revegetate areas disturbed during construction activities and those areas where understory vegetation is lost due to concentrated bear activity, and monitor the site for invasion of noxious weeds and treat affected areas in a timely manner.

There would be no reduction in acreage or productivity of any agricultural land according to any of the Alternatives. The site has a history of logging. Current activities are unlikely to affect the overstory.

## **Wildlife Resources**

Potentially significant impacts to wildlife from the Alternatives A, B, and C center on black and grizzly bears. The menagerie is situated in important habitat for both bear species. While the potential impacts from the menagerie to bear habitat are small, habitat fragmentation resulting from the combination of all

development in the area may be significant. Human development in the area attracts bears that are seeking food. The habituation and food-conditioning of black and grizzly bears in the area has been documented by MFVWP. Also, it is possible that the presence of captive bears (e.g., scent marking behavior) at the facility could serve to further attract wild bears. The individual effect the menagerie may have as an attractant to wild bears would likely be minor, but would be cumulative when taking into account the effects of development in the area as a whole. The attraction of wild bears to the vicinity of the menagerie would act to increase the risk of bear mortality. In the case of the federally-threatened grizzly bear, increased mortality has significant negative implications to grizzly populations.

Ingress and egress of wild and captive bears, respectively, can have adverse impacts to wild bears. This creates the potential for interbreeding between wild and captive bears, which would compromise the genetic integrity of the wild populations. Direct contact between wild and captive bears increases the potential for disease transmission. Bears can serve as reservoirs of several diseases of importance to animal and human health. Bears are susceptible to rabies virus and there has been a documented case of a rabies-infected black bear at the menagerie in the past. Other important diseases to which bears are susceptible include salmonella, brucellosis, distemper, and mange. Some of these diseases also have implications to the health of livestock. Animals at the menagerie would be maintained at densities greater than those normally seen in nature. Confinement to small areas facilitates the continual seeding of the soil with parasite eggs, which serves to maintain infections. For these reasons, animals held in captivity tend to have increased prevalence of disease. Disease acquired by wild bears from captive bears would add stress to the wild populations and can result in direct mortality of individuals.

The impacts identified above are particularly significant if affecting the threatened grizzly bear population. Some of the potential impacts of Alternative A to wildlife are lessened by Alternative B (maintaining brown bears in cages with additional fencing separating visitors from the cages) and Alternative C (no brown bears), but not eliminated. Alternatives A, B and C would require full compliance with all Required Stipulations. These stipulations include neutering captive bears, which eliminates the potential for interbreeding. Additional mitigation measures are described below.

### **Risks/Health Hazards**

Bears can serve as reservoirs of diseases that are important to human and environmental health. There are no hazardous substances associated with the menagerie, but there is potential for the dispersal of pathogens from the facility. Livestock or alternative livestock are susceptible to several disease found to infect black and brown bears. Brucellosis and tuberculosis are two disease of particular significance to the livestock industry. If captive bears at the menagerie were to be infected with these diseases and escaped, they could be a threat to animal health. In addition to brucellosis and tuberculosis, bears can serve as reservoirs of rabies, salmonella, and numerous parasitic diseases. These diseases pose threats to menagerie

staff and visitors. The public at large would be at risk if an infected captive animal should escape from the menagerie or if captive animals transmit diseases to wild animals. Human exposure to rabies virus from captive animals would represent a significant public health threat. Implementation of the Required Stipulations mentioned above helps to mitigate the potential risks and health hazards posed by diseases. Particularly important is implementation of a sound veterinary health plan and improved fencing to prevent ingress or egress of wild and captive bears, respectively. Additional mitigations include vaccinating staff against rabies virus and training staff to recognize symptoms of various diseases.

Captive bears at the menagerie are socialized with humans, conditioned to eat human-derived foods and maintained at densities not found in the wild. Visitors observing bears under these conditions may not appreciate the danger posed by bears, captive or wild. Providing visitors with literature describing the differences between captive and wild bears and the dangers posed by bears would mitigate this situation.

Captive bears, regardless of socialization with humans and conditioning, do pose a safety hazard to humans. Menagerie staff working with the bears and visitors are exposed to some level of safety risk. Bears, especially brown bears, are very powerful animals and current fences at the menagerie pose little impediment to a bear that decides to breach a fence. The brown bears currently residing at the facility are sub-adults and have reached less than 50% of their adult size and weight. In addition, the brown bear species (*Ursus arctos*) has fundamental behavioral differences in relationship to a black bear which may increase the potential risks to human safety in some situations. In 1991, a black bear escaped from the menagerie through a hole in the perimeter fence, demonstrating that accidental escape can occur. Along the perimeter fence there is a buffer (c.a. 10 feet) sufficient to drive a pickup truck. This buffer is inadequate to prevent trees from falling and compromising the integrity of the fence. Fallen trees could allow ingress or egress of wild or captive bears, respectively, which would pose a significant risk to human safety. Any captive bears that escape the menagerie would pose a public safety hazard. Similarly, any wild bear attracted to the menagerie and/or breaching the menagerie fence would pose a hazard to public safety. Most of these safety risks can be mitigated by constructing improved fencing that minimizes the potential for contact between visitors and captive bears (see Required Stipulations under Section 5). Additional electrified fence arrays internal and external to the perimeter fence would minimize the potential for ingress and egress of wild and captive bears, respectively. However, despite the Required Stipulations and recommended mitigation measures, the potential for physical harm to staff and the public from brown bears is not sufficiently mitigated under Alternative A (the Proposed Action).

### **Cumulative Effects**

Any action contributing to the loss of individual grizzly bears (direct or indirect) may represent a cumulative impact to the local population. The menagerie is situated in important grizzly bear habitat, and high rates of human-bear conflicts occur in the vicinity of the menagerie. It is most likely that the

immediate short-term impacts of the menagerie are minor. However, any additional attraction of bears, habituation, food conditioning, disease transmission, or interbreeding would contribute to significant cumulative impacts to the population.

## **EA CONCLUSION**

MEPA and roadside zoo and menagerie statutes require MFWP to conduct an environmental analysis for menagerie licensing as described in the *Introduction* of this *Summary* section (p. 1). MFWP prepares EAs to determine whether a project could have a significant effect on the environment. If MFWP determines that a project could have a significant impact that could not be mitigated to less than significant, the MFWP would prepare a more detailed Environmental Impact Statement (EIS) before making a decision.

Based on the criteria evaluated in this EA, an EIS would not be required for the Kilpatrick Roadside Menagerie for alternatives B and C.. The appropriate level of analysis for the Alternatives B, and C is a mitigated EA because all impacts of the Alternatives have been accurately identified in the EA, and all identified significant impacts would be mitigated to minor or none. Impacts resulting from Alternative A, however, have been identified and cannot be mitigated under the proposed alternative.

## **MITIGATION MEASURES**

The mitigation measures described in this section address both minor and significant impacts associated with the Kilpatrick Roadside Menagerie, including Alternatives A, B, and C. MFWP would require stipulations to mitigate all potentially significant impacts from any Alternative. Potential minor impacts from the Alternatives are addressed by mitigation measures that are strongly recommended to remain in compliance with state and federal environmental laws, but are not required. Non-compliance with water quality laws would result in enforcement actions initiated by the Montana Department of Environmental Quality.

### **Required Stipulations**

The following stipulations are imposed by MFWP for the Kilpatrick Roadside Menagerie and are designed to mitigate significant impacts identified in the EA to below the level of significance:

- (1) *Under Alternative C (only), no brown bears would be allowed.*

This stipulation, applicable only to Alternative C, protects the federally-threatened grizzly bear population by reducing the potential attraction of wild grizzlies to the menagerie and eliminating the potential for



captive brown bears to interbreed with wild bears. It also serves to reduce the potential for disease transmission to wild populations and reduces risks to human safety.

- (2) *All bears must be sterilized.*

This stipulation is imposed to mitigate potentially significant risk to wild bears. Neutering captive bears would prevent interbreeding between captive and wild bears and maintain the genetic integrity of wild populations.

- (3) *All bears must be tattooed with a unique identifying code.*

This stipulation ensures the positive identification of captive bears and would allow for animals that escape to be readily identified.

- (4) *Food storage must be in odor-proof containers as per USDA APHIS rules.*

Proper food storage and handling reduces the potential to attract wild bears to the menagerie.

- (5) *A veterinary-care plan must be developed and implemented, including description of specific vaccination schedules.*

An appropriate veterinary health plan minimizes the potential for captive bears to contract diseases or to go undiagnosed. This stipulation helps prevent the transmission of disease between captive and wild populations and between captive bears and humans.

- (6) *No road-killed ungulates may be used in the feeding program.*

In addition to reducing the potential to attract wild bears, it reduces the potential for captive bears to become infected with several parasitic diseases.

- (7) *All provisions of the roadside zoo and menagerie regulations apply, except for the caging requirements (ARM 12.6.1302). Note that under Alternative B, captive brown bears would be confined in accordance with ARM 12.6.1302.*

Adherence to the statutes ensures for the appropriate care and treatment of captive animals.

- (8) *Fencing Requirements:*

- (a) *Backup fence energizer, 12-volt system, deep cycle battery.*

- (b) *Warning signs adequate to protect public, if electrical fence system is approached from outside park.*
- (c) *Exterior fencing requirements consistent with the original stipulations prepared for the 1991 EA.*

This stipulation helps to mitigate the potential ingress of wild bears or the egress of captive bears. It also helps to protect human safety.

*(9) Additional Fencing Requirements:*

- (a) *Enhance existing fence per recommendations (as per memo from Mike Madel of 6/14/91; see Appendix B), or*
- (b) *Develop outside perimeter fence and use trained dogs to minimize or prevent bear escapement or entry and human entry or injury.*

This stipulation was identified as "fencing recommendations" under the previous permit. However, based upon the results of this EA, these are additional fencing requirements that further mitigate the potential ingress of wild bears or the egress of captive bears, while helping to protect human safety.

*(10) Permit review -- annually with revocation rights.*

This stipulation helps to ensure compliance with the ARMs and Required Stipulations.

*(11) Escaped bears -- owner liable for damage and for expenses incurred in capturing escaped bears.*

This stipulation provides incentive for protecting against the egress of captive bears and provides for reimbursement to the state for expenditures related to capturing escaped bears.

**Additional Required Stipulations:**

- (12) Report ingress of any wild bears or egress of captive bears to the Montana FWP immediately. The report must contain the probable reason why or how ingress/egress occurred.*

This stipulation ensures that problem situations are dealt with promptly, while avoiding injury to humans or the bear, and minimizing the transmission of disease.

- (13) Removing bear fecal matter on a daily basis. Collected fecal material should be stored odor-proof containers until removal from the site and disposed at a site isolated from surface water and groundwater. Disposal must meet county solid waste regulations.*

This stipulation aids in preventing objectionable odors, protects ground water, and reduces the transmission of parasites and other diseases.

### **Recommended Mitigation Measures**

The following mitigation measures address minor impacts identified in the Kilpatrick Roadside Menagerie EA for resources having the most potential affects from Alternatives A, B and C:

#### **Land Resources**

- Revegetate soils disturbed by construction activities or concentrated bear activity.
- Rotate the use of areas within the menagerie, allowing vegetation to recover in rested areas. Revegetate intensely used areas.

#### **Air Resources**

- To further reduce odors, areas with accumulations of urine may be treated with water and lime.

#### **Vegetation Resources**

- Monitor the proposed game farm site for invasion of noxious weeds and treat affected areas in a timely manner.
- Rotate bear utilization areas to allow for disturbed vegetation to recover
- Revegetate disturbed areas.

#### **Wildlife Resources**

- Current fencing may be inadequate to prevent ingress of wild bears or egress of captive bears. An additional electrified fence array, both interior and exterior to the perimeter fence is recommended. Such an array would consist of alternating hot and ground wires to a height of 48 inches. This design is used by MFWP to secure orchards and apiaries. MFWP can provide details of the design.
- Remove trees within 20 feet of the perimeter fence on either side of the enclosure and secure a 3/8-inch steel cable to the top of the fence to prevent excessive fence compression should a tree fall on it.

- Inspect fences on a regular and immediately after events likely to damage fences to ensure integrity.
- Store all trash in odor-proof containers.
- Provide literature to visitors that describe the dangers of both wild and captive bears.

#### **Risk/Health Hazards**

- Provide rabies vaccinations to those staff working closely with bears.
- Train staff to recognize symptoms of diseases to which bears are susceptible.
- Provide literature to visitors that describe the dangers of both wild and captive bears.

#### **Cultural Resources**

- Stop work in the area of any observed archeological artifact. Report discovery of historical objects to the Montana Historical Society in Helena.

E:\GreatBear\Adv\fig1.mxd

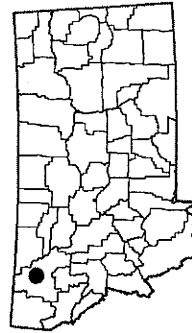


USGS 1:24000 Hungry Horse Quadrangle

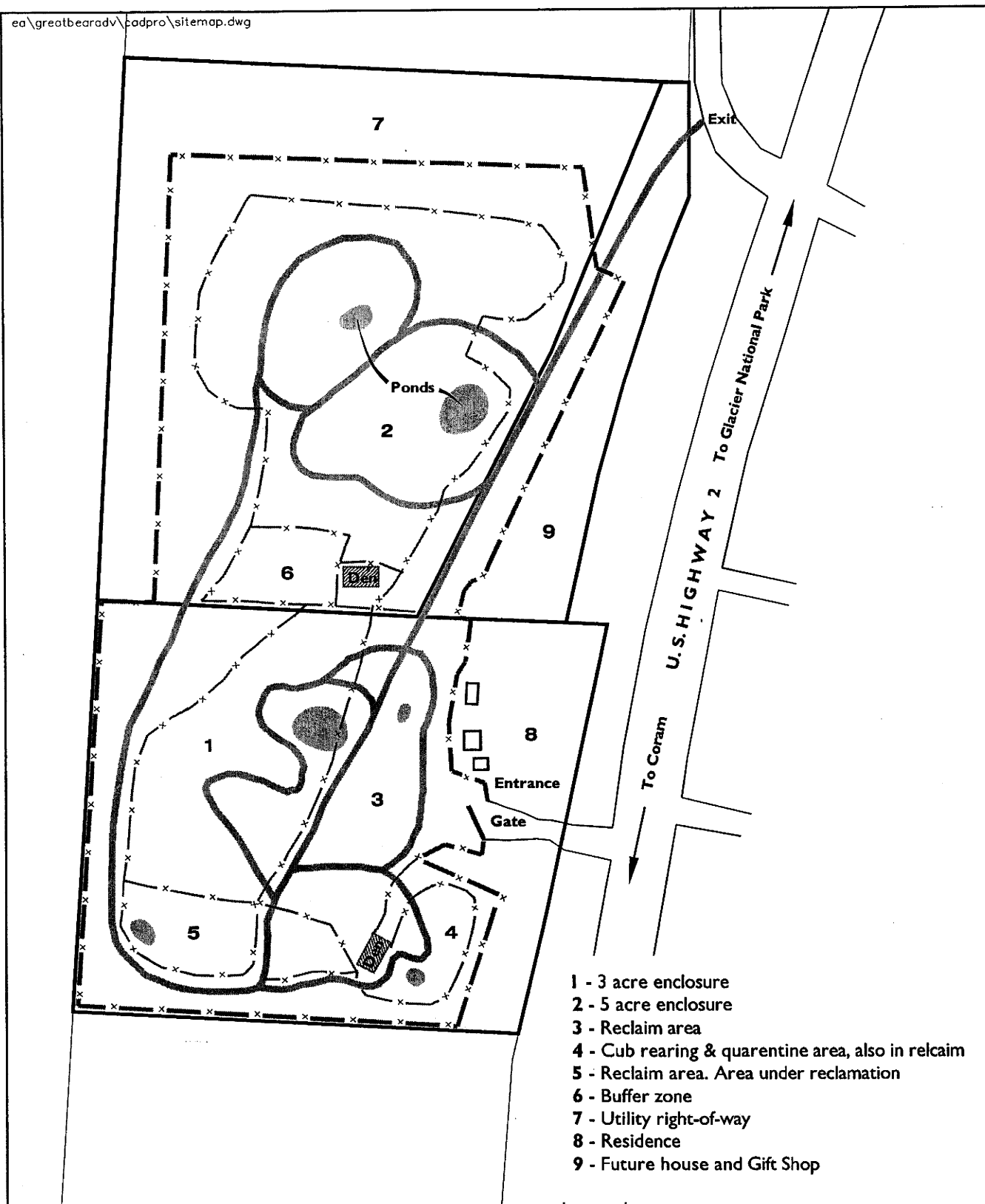


**MAXIM**  
TECHNOLOGIES INC.<sup>®</sup>

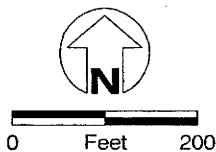
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Location Map  
Kilpatrick EA  
Montana Fish, Wildlife & Parks  
FIGURE 1



Source: Drawing provided by R.A. Kilpatrick, March 28, 2003



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- x— Perimeter Electric Fence
- x- Interior Electric Fence
- ==== Interior Roads
- Land Parcel Owned by R.A. Kilpatrick

Facility Map  
Kilpatrick Roadside Menagerie  
Coram, Montana  
**FIGURE 2**







179 black/grizzly bear incidents within the buffer area (1995-2002)  
276 water wells within the buffer area dating from 1886-2002  
(the number and locations of wells serves as an index of human development)

Miles



**MAXIM**

 US Highway 2  
 Water Wells  
 Buffer Area  
 Bear Points

**Bear Incidents & Well Locations  
Kilpatrick EA  
MT Fish, Wildlife, & Parks  
FIGURE 3**

## ENVIRONMENTAL ASSESSMENT CHECKLIST

### **PART I. KILPATRICK ROADSIDE MENAGERIE LICENSE APPLICATION INFORMATION**

Montana Fish, Wildlife & Park's authority to regulate roadside zoos and menageries is contained in sections 87-4-801 through 87-4-808, MCA and ARM 12.6.1301 through 12.6.1309.

**1. Name of Project:** Kilpatrick Roadside Menagerie

**Date of Acceptance of Completed Application:** March 17, 2003

**2. Name, Address and Phone Number of Applicant(s):**

Russell Arnold Kilpatrick  
c/o General Delivery  
Coram, MT 59913  
(406) 387- 4662

**3. If Applicable:**

**Estimated Construction/Commencement Date:** N/A

**Estimated Completion Date:** N/A

**Is this an application for expansion of existing facility or is a future expansion contemplated?**

Yes.

**4. Location Affected by Proposed Action (county, range and township):**

Flathead County; approximately 15 acres.

T31N R19W Section 21 NW¼ SW¼ ; Tracts 2, 3, and 3F



5. **Project Size:** Estimate number of acres that would be directly affected that are currently:

- |   |                                |
|---|--------------------------------|
| (a) Developed:                          | (d) Floodplain..._____ acres   |
| residential._____ acres                 |                                |
| industrial._____ acres                  | (e) Productive:                |
|   | irrigated cropland._____ acres |
| (b) Open Space/                         | dry cropland_____ acres        |
| WoodlandsAreas <u>15</u> acres          | forestry_____ acres            |
|   | rangeland._____ acres          |
| (c) Wetlands/Riparian Areas _____ acres | other_____ acres               |

6. **Map/site plan:**

The following maps are included in the introductory summary of this EA:

**Figure 1:** Site Map.

**Figure 2:** Schematic of menagerie layout.

**Figure 3:** Distribution of black and brown bear management incidents relative to development (as indicated by well locations), 1995 – 2002.

7. **Narrative Summary of the Proposed Action or Project including the Benefits and Purpose of the Proposed Action:**

**ALTERNATIVE A – The Proposed Action.**

MFWP received an initial application dated March 17, 2003 from Mr. Russell Arnold Kilpatrick for a drive-through roadside menagerie (Great Bear Adventure) in Flathead County, Montana (Kilpatrick 2003a). Kilpatrick's menagerie (Figure 1) will be located approximately 1 mile north of Coram, Montana. The Proposed Action (Alternative A) consists of a drive-through park occupying approximately 15 acres. The enclosure will eventually house five black bears (*Ursus americanus*) and five brown bears (*Ursus arctos*). The facility is intended to provide educational opportunities to paying visitors who will be able to view bears in a somewhat natural habitat and observe bear behavior and social interactions (Kilpatrick 2003b, Pers. Comm.). Bears will be able to move about the compound while visitors travel through the menagerie in their automobiles. The location is near Glacier National Park and takes advantage of opportunities to attract travelers and tourists during late spring, summer, and early fall seasons.

While originally permitted in 1991 for an 8-acre facility, the existing menagerie is approximately 15 acres (Figure 2). The menagerie is enclosed by a perimeter fence, currently consisting of a 6-foot woven wire, high-tensile alternative livestock fence supported by steel posts spaced at approximate 20-foot intervals (Kilpatrick 2003b, Pers. Comm.). Two electric wire strands are at the top of the fence (one hot wire), (Kilpatrick 2003a) bringing the total height to 8 or 9 feet. Three hot wires are located on the inside perimeter fence near the bottom of the fence. There is a cleared area on the inside of the perimeter fence wide enough for a pickup truck to travel along the fence (ca. 10 feet). Low electrical fences (three strands equally spaced to approximately 3 feet high) are positioned within the facility to discourage the bears from approaching the perimeter fence. Other low electrical fences are positioned throughout the facility to direct bear movements within the menagerie.

Visitors enter the facility through the main gate. This gate is constructed of wood (vertical boards), eight feet high and non-electrified. Two other gates will be hard gates 8 feet high and electrified in a fashion similar to the perimeter fence. Bears are free to wander along and across the path that visitors travel in their automobiles. Bears are restricted from a segment of the path, where visitors may open their car windows, by low electric fences on either side of the path. Automobiles travel over an electrified (hot) mat when entering and exiting this segment.

Denning areas are 10 x 12 feet and enclosed with 6-foot woven wire alternative livestock fence and a series of electric wires and contain dens constructed of cement blocks and logs. The facility contains six man-made ponds lined with concrete. Fresh water is periodically pumped into the ponds.

Bears are socialized with humans and conditioned to avoid automobiles and fences. These training procedures are implemented at the menagerie by Mr. Kilpatrick and several volunteer trainers. The socialization and conditioning facilitate the menagerie staff in controlling the bears while intending to provide for the safety of staff and visitors.

Bears are fed a variable diet of dog food and vegetables, and sometimes fruit. The diet is supplemented occasionally with fish or fish pellets, but rarely are the bears fed meat. Vitamins and minerals are added to the diet. Food is dispersed daily throughout the compound at unpredictable locations to facilitate bear foraging activity. Food is prepared and stored in a secured building outside of the perimeter fence near the Kilpatrick's residence. There are plans to build a larger food preparation and storage building outside of the perimeter fence, on the east side of the menagerie.

Veterinary care is provided by a licensed veterinarian. Bears receive an annual physical exam. Other veterinary care is provided on an as-needed basis. The general health of the bears is inspected daily by Mr. Kilpatrick and other trainers at the site. Mr. Kilpatrick will treat minor injuries. Bear fecal material is removed from the compound by menagerie staff on a daily basis to eliminate unpleasant odor and minimize the potential for disease transmission (e.g., intestinal parasites).

Currently, the Kilpatrick residence is located in the southeast quadrant of the property, adjacent to the perimeter fence. A new residence and gift shop are planned for the future.

Required Stipulations identified in Section 5 (Fish & Wildlife) apply to Alternative A.

**ALTERNATIVE B – Black bears free-ranging as originally permitted in 1991, brown bears confined per ARMs.**

Under Alternative B, Mr. Kilpatrick would be authorized to operate a 15-acre roadside menagerie as a drive-through facility. Black bears would be permitted to be free-ranging within the enclosed compound as per the original permit conditions with stipulations (see Alternative C) and other stipulations. Alternative B would allow for Mr. Kilpatrick to possess and display brown bears according to the conditions specified by ARM, where brown bears would be confined at all times in cages and additional fencing would be installed to protect the public and wildlife populations from the brown bears (see Alternative C and Appendix A.). Fencing design would be consistent with designs used at other facilities in Montana holding brown bears such as the Grizzly and Wolf Discovery Center in West Yellowstone, Montana, Montana Wildlife Education Inc. in Bozeman, Montana, and Triple D Game Farm in Kalispell, Montana. Those designs include 10 to 12 foot 9 gauge wire fences or cement fences supplemented with electric wires in conjunction with “viewing dry moats” which provide public viewing across a 12 foot deep dry moat.

Bears would be fed a diet similar to that proposed in Alternative A. Black bear could be fed by placing food at unpredictable locations with the menagerie, while brown bears would be fed within their cages. Veterinary care would be similar to that proposed under Alternative A. Animal socialization, conditioning and training would be modified as needed by the applicant.

Required Stipulations as described in Section 5 (Fish & Wildlife) apply to Alternative B.

**ALTERNATIVE C – Strict adherence to conditions of the original permit issued in 1991, and no brown bears.**

Under Alternative C, Mr. Kilpatrick would be authorized to operate a roadside menagerie as a drive-through facility for black bears only on 15 acres, while adhering to the conditions of the original permit, and Required Stipulations.

In 1991 Mr. Kilpatrick applied for a Roadside Zoo and Menagerie Permit to operate a drive-through bear park on an 8-acre parcel of land approximately one mile north of Coram, Montana. Black bears were to be free-ranging within an enclosed compound, where visitors could drive through the compound and view the bears. A permit was granted with accompanying stipulations. The stipulations were added to the conditions of the permit as a means of allowing Mr. Kilpatrick to operate outside of the conditions specified in the Administrative Rules of Montana (ARM), Sub-Chapter 13 – Roadside Zoo Regulations, and provide the safety of staff, visitors, and captive and wild bears. Black bears would be fed a diet similar to that proposed in Alternative A. Veterinary care; animal socialization, conditioning and training would be similar to that proposed under Alternative A.

The stipulations appended to the original permit are as follows:

1. Black bear only.
2. All bears must be sterilized.
3. All bears must be tattooed with a unique code.
4. Food storage must be in odor-proof containers as per USDA APHIS rules.
5. A veterinary-care plan must be developed and implemented, including descriptions of specific vaccination schedules.
6. No road-killed ungulates may be used in the feeding program.
7. All provisions of the roadside zoo and menagerie regulations apply, except for the caging requirements (ARM 12.6.1302).
8. Fencing requirements:
  - a. Backup fence energizer, 12-volt system, deep cycle battery.

- b. Warning signs adequate to protect public if electrical fence system approached from outside the park.
9. Additional fencing requirements (in 1991 these were identified as recommendations):
- a. Enhance existing fence per recommendations (as per memo from Mike Madel of 6/14/91; see Appendix B), or
  - b. Develop outside perimeter fence and use trained dogs to minimize or prevent bear escapement or entry and human entry or injury.
10. Permit review – annually with revocation rights.
11. Escaped bears – owner liable for damage and/or expenses incurred in capturing escaped bears.

Stipulation #9 as per the Madel Memo included 8 issues concerning modifications to the perimeter fence to provide containment of the captive black bears through modifications to the electric wires and the 2 foot "barbed wire" which topped the 6 foot mesh fence providing for the exterior perimeter fencing.

**ALTERNATIVE D – No Action Alternative:**

Under the No Action Alternative, MFWP would not issue a license for the Kilpatrick Roadside Menagerie. Therefore, no bears would be allowed on the property. Implementation of the No Action Alternative would not preclude other activities allowed under local, state and federal laws to take place at the menagerie site.

**8. Listing of any other Local, State or Federal agency that has overlapping or additional jurisdiction:**

**(a) Permits:**

<u>Agency Name</u>	<u>Permit</u>	<u>Approval Date and Number</u>
USDA	Class C Exhibitors License	81-C-0017

**(b) Funding:**

<u>Agency Name</u>	<u>Funding Amount</u>	<u>Approval Date</u>
--------------------	-----------------------	----------------------

**(c) Other Overlapping or Additional Jurisdictional Responsibilities:**

<u>Agency Name</u>	<u>Type of Responsibility</u>
Montana Department of Livestock	Import permits
Montana Department of Environmental Quality (DEQ)	water quality, air quality, waste management
Montana State Historical Preservation Office (SHPO)	cultural resources
Montana Department of Natural Resources and Conservation (DNRC)	water rights
Natural Resource Conservation Service (NRCS)	soil conservation
Flathead County Weed Control District	weed control
U.S. Department of Agriculture (APHIS)	Animal Welfare
U.S. Fish and Wildlife Service	Threatened, Endangered, and Sensitive Species

**9. List of Agencies Consulted During Preparation of the EA:**

Montana Department of Environmental Quality  
Montana Department of Livestock  
Montana State Historical Preservation Office  
Montana Natural Heritage Program  
Montana Bureau of Mines and Geology  
Montana Department of Natural Resources and Conservation  
Flathead County Planning Office  
Flathead County Tax Department  
National Park Service, Glacier National Park  
USDA Forest Service  
US Fish and Wildlife Service

**References:**

**Kilpatrick, R.A. 2003a.** Russell A. Kilpatrick's application for Roadside Menagerie Permit. Dated March 17, 2003.

**Kilpatrick, Russell A., 2003b.** Applicant, personal communication with Pete Feigley, Maxim Technologies, Inc., Helena, MT. March 26.

**Montana Code Annotated. 1999.** MCA 87-4-801 through 87-4-808.

**Administrative Rules of Montana. 1972.** Sub-Chapter 13 – Roadside Zoo Regulations. ARM 12.6.1301 through 12.6.1309.

## **PART II. ENVIRONMENTAL REVIEW**

This section of the EA presents results of an environmental review of Kilpatrick's roadside drive-through menagerie. The assessment evaluated direct and indirect impacts and cumulative effects of the Proposed Action on the following resources of the physical environment: land, air, water, vegetation, fish and wildlife; and the following concerns of the human environment: noise, land use, human health risk, community impacts, public services and taxes, aesthetics and recreation, and cultural and historical resources. Impacts were determined to fall in one of four categories: unknown, none, minor and significant. Each alternative is assessed in terms of its impacts. For the purposes of this EA, and in accordance with ARM 12.2.429 through 12.2.431, these terms are defined as follows:

### **EA Definitions**

**Cumulative Effects:** Collective impacts on the physical and human environment of the Proposed Action or Alternatives when considered in conjunction with other past and present actions related to the Proposed Action by location or generic type. Related future actions must also be considered when these actions are under concurrent consideration by any state agency through pre-impact statement studies, separate impacts statement evaluation, or permit processing procedures.

**Unknown Impacts:** Information is not available to facilitate a reasonable prediction of potential impacts.

**Significant Impacts:** A determination of significance of an impact in this EA is based on individual and cumulative impacts from the Proposed Action. If the Proposed Action results in significant impacts that cannot be effectively mitigated, MFWP must prepare an EIS. The following criteria are considered in determining the significance of each impact on the quality of the human environment:

- severity, duration, geographic extent and frequency of occurrence of the impact;
- probability that the impact would occur if the Proposed Action occurs;
- growth-inducing or growth-inhibiting aspects of the impact, including the relationship or contribution of the impact to cumulative effects;
- quantity and quality of each environmental resource or value that would be affected, including the uniqueness and fragility of those resources or values;
- importance to the state and to society of each environmental resource or value that would be affected;
- any precedent that would be set as a result of an impact of the Proposed Action that would commit MFWP to future actions with significant impacts or a decision in principle about such future actions; and
- potential conflict with local, state, or federal laws, requirements, or formal plans.



## PHYSICAL ENVIRONMENT

I. <u>LAND RESOURCES</u>	POTENTIAL IMPACT				CAN IMPACT BE MITIGATED	COMMENT INDEX
	Would Alternatives A/B/C result in:	UNKNOWN	NONE	MINOR	SIGNIFICANT	
a. Soil instability or changes in geologic substructure?			A/B/C			AI(a),
b. Disruption, displacement, erosion, compaction, moisture loss, or over-covering of soil which would reduce productivity or fertility?				A/B/C	Yes	AI(b), BI(b)
c. Destruction, covering or modification of any unique geologic or physical features?			A/B/C			AI(c)
d. Changes in siltation, deposition or erosion patterns that may modify the channel of a river or stream or the bed or shore of a lake?			A/B/C			AI(d)

### Affected Environment:

The Kilpatrick drive-through menagerie is located approximately 1 mile north of Coram, Montana (Figure 2). The property is bordered on the east by Highway 2 and County right-of-way, and by private property on the west, south and north (Figure 1). The Kilpatrick property is bordered by two commercial businesses, the Glacier's Mountain Resort to the north and the Sundance Campground to the south and southeast. Highway 2 is the western gateway to Glacier National Park, which is located a few miles north of Coram. The Middle Fork of the Flathead River is located about 1.5 mile southwest of the menagerie. Most of the surrounding mountains are forested and managed by the Flathead National Forest.

The menagerie lies on the east side of the Middle Fork of the Flathead River valley at an elevation of about 3,200 feet. The property currently contains a 15-acre facility. A small secure shed located just outside of the perimeter fence is used for food preparation and storage. Approximately 85% of the area is forested. Additionally, there are six man-made cement-lined fresh-water ponds within the perimeter fence and several paths for automobile travel.

Topographic features in the vicinity of the site include the floodplain of the Middle Fork of the Flathead River, and rolling hills and pothole depressions characteristic of glacial deposits resulting from the late Wisconsin alpine glaciers which were present in the area (Johns, 1970, p. 7). Badrock Canyon, where the Middle Fork and South Fork of the Flathead River converge, is located approximately 4 miles

southwest of the site. Most of the surrounding mountains are forested and managed by the Flathead National Forest. The menagerie is on glacial moraine with gentle kettle topography.

Soil information was obtained from the Soil Survey of the Flathead National Forest Area, Montana (Martinson et al. 1983). The soil survey was done at an Order III level and is suitable for planning land use and the development of resources. The Kilpatrick menagerie is wholly contained within a single soil-mapping unit, Dystric Eutrochrepts, till substratum (Unit 27-7). The Dystric Eutrochrepts are present on kames and kettles or terraces with the lower soil members forming in glacial till. Soils and substrata contain 50 to 80 percent rounded rock fragments (Martinson et al. 1983). These soils are mantled by volcanic ash influenced loess and are highly productive if soil surface layers are not displaced or removed. Road sediment hazard is rated as moderate (Martinson et al. 1983). These soils have a moderate erosion potential and sediment delivery is low.

**ALTERNATIVE A – Proposed Action:**

- AI(a) There will be no deep excavation or creation of steep slopes that would result in soil instability or changes in geologic substructure.
- AI(b) The proposed menagerie, which will house 10 bears, should have only minor impacts to land and soil resources. The primary impacts would be due to construction of fences, ponds, and roads, along with trampling and compaction of the soil surface layers as a result of animals and handlers moving about the compound, particularly in areas with concentrated activity. Most construction activities have been completed and disturbed areas have been revegetated. There are plans to construct a new residence, gift shop, and food handling/storage building. Impacts resulting from future construction activities can be mitigated by revegetating disturbed areas following construction. Soil compaction from concentrated animal activity can be mitigated by resting small areas by excluding animals and revegetating those areas as needed. Because of the gentle topography, soil erosion from water would not be a problem.
- AI(c) There are no unique geologic or physical features at the menagerie.
- AI(d) There are no stream channels nearby to be impacted. Surface disturbance and topography are insufficient to result in erosion problems.

**ALTERNATIVE B – Free-ranging black bears, confined brown bears:**

BI(a) Same as for Alternative A.

BI(b) The construction of additional enclosures or cages and barriers would result in more surface area being disturbed. Impacts resulting from construction can be mitigated by re-vegetating disturbed areas following construction. The proposed menagerie under Alternative B would have only minor impacts to land and soil resources. Because of the gentle topography, soil erosion from water would not be a problem.

BI(c) Same as for Alternative A.

BI(d) Same as for Alternative A.

**ALTERNATIVE C – Free-ranging black bears only, as originally permitted:**

Impacts are anticipated to be the same as for Alternative A for all evaluation criteria.

**ALTERNATIVE D – No Action:**

Under the No Action Alternative, the current condition of the property is not expected to change.

**Cumulative Effects:**

The proposed permit area does not contain any unique or significant soil or land resources that would be lost due to implementation of either Alternative Action.

**Comments:**

**Required Stipulations:** None

**Recommended Mitigation Measures**

- Re-vegetate soils disturbed by construction of any buildings, fences or other structures.
- Rotate the use of areas within the menagerie, allowing vegetation to recover at rested areas. Revegetate intensely-used areas as needed.

**References:**

- Johns, W. M., 1970.** Geology and Mineral Deposits of Lincoln and Glacier Counties, Montana. Montana Bureau of Mines and Geology, Butte, Montana, Bulletin 79. 182 pages with maps.
- Martinson, A.H., W.J. Basko, D. Sirucek, J. Coyner, L. Ross, and G. Ford. 1983.** Soil Survey of the Flathead National Forest Area, Montana. U.S.D.A. Forest Service and Soil Conservation Service in Cooperation with Montana Agricultural Experiment Station.

## **PHYSICAL ENVIRONMENT**

2. <b>AIR</b>	POTENTIAL IMPACT				CAN IMPACT BE MITIGATED	COMMENT INDEX
	Would Alternatives A/B/C result in:	UNKNOWN	NONE	MINOR	SIGNIFICANT	
a.	Emission of air pollutants or deterioration of ambient air quality?		A/B/C			A2(a)
b.	Creation of objectionable odors?			A/B/C	Yes	A2(b)
c.	Alteration of air movement, moisture, or temperature patterns or any change in climate, either locally or regionally?		A/B/C			A2(c)
d.	Adverse effects on vegetation, including crops, due to increased emissions of pollutants?		A/B/C			A2(d)

### **Affected Environment:**

The Kilpatrick menagerie site is located adjacent to residential and commercial properties and Highway 2, which serves as the main western gateway to Glacier National Park. Commercial campgrounds/resorts are located immediately north and south of the site. This area was not classified for air quality attainment status (DEQ 1997).

### **ALTERNATIVE A – Proposed Action:**

A2(a). There will be no emission of air pollutants at the menagerie.

A2(b). With 10 bears at the menagerie, there is potential for accumulation of substantial quantities of excrement, which could result in objectionable odor. Improper food and waste storage could also contribute to odors. The applicant reports that standard operating practice is for menagerie staff to remove bear fecal matter from the enclosure on a daily basis to minimize the potential for problems odors (Kilpatrick 2003b, Pers. Comm.). It is important that the applicant maintain that practice and store collected animal waste in odor-proof containers until removed from the site for proper disposal. All food and refuse should be kept in odor-proof containers. Bears, like many mammals may tend to urinate and defecate in specific areas. The accumulation of urine from repeated urination also can contribute to objectionable odors. Such odors could be mitigated by treating those areas with powdered lime and sprinkling with water to dilute concentrated urine.

A2(c). There will be no activities that could affect climate.

A2(d). Since there will be no emission of pollutants, there will be no impacts to vegetation from pollutants.

**ALTERNATIVE B – Free-ranging black bears, confined brown bears:**

The potential impacts to air under Alternative B would be the same as under Alternative A. The same mitigation measures should be applied to protect against objectionable odors.

**ALTERNATIVE C – Free-ranging black bears only, as originally permitted:**

The potential impacts to air under Alternative C would be the same as under Alternative A. The same mitigation measures should be applied to protect against objectionable odors.

**ALTERNATIVE D – No Action:**

No impacts to air quality are expected to result from the No Action Alternative.

**Cumulative Effects:**

There are no anticipated cumulative effects on air resources associated with any of the Alternative Actions.

**Comments:**

**Required Stipulations:**

- Removing bear fecal matter on a daily basis to reduce the potential for problem odors. Collected fecal material should be stored in odor-proof containers until removal from the site and disposed at a site isolated from surface water and groundwater. Disposal must meet county solid waste regulations.

**Recommended Mitigation Measures:**

- To further reduce odors, areas with accumulations of urine may be treated with water and lime.

**References:**

**Kilpatrick, Russell A., 2003b.** Applicant, personal communication with Peter Feigley, Maxim Technologies, Inc., Helena, MT. March 26.

**Montana Department of Environmental Quality (DEQ), 1997.** Montana Air Quality Non-Attainment Areas. Revised January, 1997.

## PHYSICAL ENVIRONMENT

3. <u>WATER</u>  Would Alternatives A/B/C result in:	POTENTIAL IMPACT				CAN IMPACT BE MITIGATED	COMMENT INDEX
	UNKNOWN	NONE	MINOR	SIGNIFICANT		
a. Discharge into surface water or any alteration of surface water quality including but not limited to temperature, dissolved oxygen or turbidity?		A/B/C				
b. Changes in drainage patterns or the rate and amount of surface runoff?		A/B/C				
c. Alteration of the course or magnitude of flood water or other flows?		A/B/C				
d. Changes in the amount of surface water in any water body or creation of a new water body?		A/B/C				
e. Exposure of people or property to water related hazards such as flooding?		A/B/C				
f. Changes in the quality of groundwater?		A/B/C				
g. Changes in the quantity of groundwater?		A/B/C				
h. Increase in risk of contamination of surface or groundwater?		A/B/C				
i. Violation of the Montana non-degradation statute?		A/B/C				
j. Effects on any existing water right or reservation?		A/B/C				
k. Effects on other water users as a result of any alteration in surface or groundwater quality?			A/B/C		Yes	A3(k)
l. Effects on other water users as a result of any alteration in surface or groundwater quantity?		A/B/C				

### Affected Environment:

Several small, concrete-lined ponds are located in the drive-through menagerie enclosure. Water is pumped into the ponds periodically from the on-site well and overflows onto the surrounding soil. The overflow infiltrates into the highly permeable deposits of sand and gravel that underlie the site. Precipitation onto the site also reportedly rapidly infiltrates these deposits, such that surface water drainage is negligible (Kilpatrick 2003b, Pers. Comm.). No portion of the site lies in the 100-year floodplain (FEMA, 2003).



Potable water for residences near the site is obtained from private wells. Public water supply wells are located at the campgrounds located immediately north and south of the site. Well records on-file with the DNRC (2003) and MBMG (2003) indicate there are approximately 74 wells within ½-mile of the site. Wells in this area range from 30 to 140 feet deep, with well depths typically ranging between 40 and 60 feet. Static water levels typically range from 20 to 50 feet below ground surface. The wells are completed in alluvial deposits consisting primarily of sand and gravel, with occasional clayey beds. The direction of groundwater flow in the site vicinity is not documented, but is likely west or southwest toward the Flathead River.

**ALTERNATIVE A – Proposed Action:**

There are no activities associated with Alternative A that could potentially affect evaluation criteria a-j, and l. Because of the mild topography and high permeability of the soils, increased runoff and erosion problems from facility construction and maintenance activities are unlikely, regardless of the Alternative

A3(k). It is possible that accumulations of large amounts of animal excrement could affect ground water quality. The applicant reports that standard operating practice is to remove fecal matter from the enclosure on a daily basis (Kilpatrick 2003b, Pers. Comm.). This practice removes potential sources of nutrient contamination to water resources. It is important that the applicant maintains that practice and stores collected animal waste in odor-proof containers until removed from the site for proper disposal.

**ALTERNATIVE B – Free-ranging black bears, confined brown bears:**

The potential impacts to water under Alternative B would be the same as under Alternative A. The same mitigation measures should be applied to protect ground water.

**ALTERNATIVE C – Free-ranging black bears only, as originally permitted:**

The potential impacts to water under Alternative C would be the same as under Alternative A. The same mitigation measures should be applied to protect ground water.

**ALTERNATIVE D – No Action:**

Current hydrologic conditions are not expected to change under the No Action Alternative.

**Cumulative Effects:**

The site is located adjacent to commercial and residential properties in a predominantly rural, forested environment. The vicinity hosts existing populations of wild bear and other game animals. A small population of captive bears would not cause any cumulative effect on water resources.

**Comments:****Required Stipulations:**

- Remove bear fecal matter on a daily basis. Fecal material should be disposed at a site isolated from surface water and groundwater. Disposal must meet county solid waste regulations.

**Recommended Mitigation Measures:** None

**References:**

**Federal Emergency Management Agency (FEMA), 2003.** Digital Q3 Flood Data Map for Flathead County. Obtained online from Internet. March 25.

**Kilpatrick, R.A. 2003b.** Applicant, personal communication with Pete Feigley, Maxim Technologies, Inc., Helena, MT. March 26.

**Montana Bureau of Mines and Geology (MBMG), 2003.** Computer File Search of Well Records. Obtained online from Internet. March 26.

**Montana Department of Natural Resources and Conservation (DNRC), 2003.** Computer File Search of Water Rights. Obtained online from Internet. March 26.

## **PHYSICAL ENVIRONMENT**

4. <b>VEGETATION</b>	<b>POTENTIAL IMPACT</b>				<b>CAN IMPACT BE MITIGATED</b>	<b>COMMENT INDEX</b>
	<b>Would Alternatives A/B/C result in:</b>	<b>UNKNOWN</b>	<b>NONE</b>	<b>MINOR</b>	<b>SIGNIFICANT</b>	
a. Changes in the diversity, productivity or abundance of plant species?			A/BC		Yes	A4(a), B4(a)
b. Alteration of a plant community?			A/BC		Yes	A4(b), B4(b)
c. Adverse effects on any unique, rare, threatened, or endangered species?		A/BC				A4(c)
d. Reduction in acreage or productivity of any agricultural land?		A/BC				A4(d)
e. Establishment or spread of noxious weeds?			A/BC		Yes	A4(e)

### **Affected Environment:**

The Kilpatrick menagerie is comprised of forested habitat (ca. 90%), an unforested powerline right-of-way and various buildings and sheds. The forested area has a history of past logging. In general, most of the trees at the site are young and less than 12-inches in diameter. The forested habitat in this area is dominated by lodgepole pine; with few Douglas fir, birch, aspen and black cottonwood. Woody undergrowth consists of western snowberry, bearberry, Oregon grape, buffaloberry, common juniper, and buckbrush. Few grasses and forbs were apparent during a site visit in late March 2003. Spotted knapweed occurs in the area and is picked when found at the menagerie (Kilpatrick 2003b, Pers. Comm.). A search of the Montana Natural Heritage Program database (MNHP 2003b) yielded no known occurrences of plant species of special concern in the immediate vicinity of the menagerie.

### **ALTERNATIVE A – Proposed Action:**

A4(a) The proposed action calls for 10 bears on approximately 15 acres of land. The site provides little natural food for bears. Consequently, an artificial feeding program is implemented at the menagerie. Over time foraging activities of bears could alter the vegetation composition and productivity, and when combined with frequent trampling of vegetation may result in the loss of vegetation in high-use areas. According to the applicant, bears are rotated among subunits of the menagerie to allow vegetation to recover in rested areas. Weed species such as spotted knapweed and Canada thistle are likely to invade highly disturbed areas. Weeds are picked by menagerie staff. The effects of concentrated bear activity on vegetation may be mitigated by frequently moving bears to different subunits within the menagerie, as currently implemented. Revegetating with native species those areas where concentrated activity has removed

vegetative cover or where vegetation is impacted from constructions activities would also help to mitigate impacts to vegetation.

- A4(b) The menagerie is dominated by native vegetation. The existing plant community would be altered at locations where buildings are constructed and at the sites where man-made ponds are installed. Concentrated bear activity can also contribute to loss of vegetation. The loss of ground cover (herbaceous and shrub) would impact plant community composition. Continued over time, this effect could significantly alter the understory plant community. Mitigation measures identified under A4(a) would also help to mitigate impacts to the understory plant community.
- A4(c) There are no known occurrences of plant species of special concern at the menagerie.
- A4(d) There is no agricultural land at the site.
- A4(e) Continual disturbance to or loss of natural understory vegetation would facilitate invasion by noxious weeds. Noxious weeds occur in the vicinity of the menagerie, particularly spotted knapweed (Kilpatrick 2003b, Pers. Comm.). Staff at the menagerie actively pick noxious weeds as they are encountered. Invasion of noxious weeds can be mitigated by mechanical (picking) or chemical treatment (herbicides) of weed infestations. Also, implementation of the mitigation measures to protect native vegetation communities [see A4(a)], would minimize the potential establishment of noxious weeds.

**ALTERNATIVE B – Free-ranging black bears, confined brown bears:**

- B4(a) Under Alternative B, there would be fewer free-ranging bears, since brown bears would be confined to cages. Consequently, the effects of daily activities of bears upon vegetation are expected to be less. However, the construction and maintenance of cages for brown bears would result in the permanent loss of vegetation productivity in those areas. Construction of additional fencing would impact vegetation. Disturbed areas should be revegetated with native species. Rotating bears to different utilization areas to allow impacted vegetation to recover can also help to mitigate impacts to vegetation.
- B4(b) Although there would be fewer free-ranging bears under this Alternative, the potential impacts to the vegetation community would be essentially the same as under Alternative A.

Potential impacts according to evaluation criteria c – e are expected to be the same as under Alternative A. Those mitigation measures for evaluation criteria a – e listed under Alternative A are applicable to this Alternative.

**ALTERNATIVE C – Free-ranging black bears only, as originally permitted**

It is anticipated that the effects to vegetation under Alternative C would be similar to those under Alternative A. The same mitigation measures are recommended.

**ALTERNATIVE D – No Action:**

The No Action Alternative would not result in impacts to the existing vegetation condition.

**Cumulative Effects:**

There are no anticipated cumulative effects on vegetation resources associated with the proposed project.

**Comments:**

**Required Stipulations:** None

**Recommended Mitigation Measures:**

- Rotate bear utilization areas to allow disturbed vegetation to recover.
- Revegetate areas disturbed during construction activities and those areas where understory vegetation is lost due to concentrated bear activity.
- Monitor the proposed menagerie site for invasion of noxious weeds and treat affected areas in a timely manner.

**References:**

**Kilpatrick, R.A. 2003b.** Applicant, personal communication with Pete Feigley, Maxim Technologies, Inc., Helena, MT. March 26.

**Montana Natural Heritage Program (MTNHP). 2003b.** Database search for species of special concern in the vicinity of the Kilpatrick menagerie. Montana Natural Heritage Program, 1515 East Sixth Ave.

## PHYSICAL ENVIRONMENT

5. <u>FISH/WILDLIFE</u>	POTENTIAL IMPACT				CAN IMPACT BE MITIGATED	COMMENT INDEX
	UNKNOWN	NONE	MINOR	SIGNIFICANT		
Would Alternatives A/B/C result in:						
a. Deterioration of critical fish or wildlife habitat?			A/B/C		No	A5(a)
b. Changes in the diversity or abundance of game species?			A/B/C		Yes	A5(b)
c. Changes in the diversity or abundance of nongame species?			A/B/C		Yes	A5(c)
d. Introduction of new species into an area?		A/B/C				A5(d)
e. Introduction of new genetic material to the local population?			C	A/B	Yes	A5(e)
f. Creation of a barrier to the migration or movement of animals?			A/B/C		No	A5(f)
g. Adverse effects on any unique, rare, threatened, or endangered species?				A/B/C	Yes	A5(g)
h. Increase in conditions that stress wildlife populations or limit abundance (including harassment, legal or illegal harvest or other human activity)?				A/B/C	Yes	A5(h)
i. Increased risk of contact and disease between menagerie animals and wild game?			A/B/C		Yes	A5(i)

### Affected Environment:

The Kilpatrick roadside menagerie is located approximately 1 mile north of Coram, Montana on the west side of Highway 2. The menagerie would consist of a drive-through park occupying approximately 15 acres. The enclosure will eventually house five black bears (*Ursus americanus*) and five brown bears (*Ursus arctos*). The menagerie and surrounding habitat are dominated by lodgepole pine forest. This area provides habitat for a variety of wildlife species. Big game in the area include white-tailed deer, mule deer, moose, elk, grizzly bear, black bear, and mountain lion. Grizzly bear, gray wolf, Canada lynx and bald eagle are federally-threatened species that occur in the area (MTNHP 2003a,b).

Bald eagles are breeding residents, spring/fall migrants, and winter residents along the Flathead River. Lynx often inhabit forested benches, plateaus, valleys, and gently rolling ridge tops in rugged mountain ranges (Koehler and Aubry 1994). It is possible that lynx may pass through the area, but are unlikely to reside in the valley bottom. Gray wolves may also pass through this area. Currently, there are no known wolf packs or radio-collared wolves in the area (Meier 2003, Pers. Comm.). Grizzly bears tend

to be solitary, are habitat generalists, and are omnivorous and opportunistic in terms of diet (USFWS 1993). Their movements are largely driven by the search for food. Grizzly bears do use habitats in the vicinity of the menagerie.

The menagerie is approximately 2 miles from public land classified as Management Situation I (MSI) habitat. According to the Grizzly Bear Recovery Plan, MSI areas are those public lands "that contain grizzly population centers and/or habitat that is needed for the survival and recovery of the species. The needs of the grizzly will be given priority over other management considerations. Land uses that can affect grizzly bears and/or their habitat will be made compatible with grizzly needs, or such uses will be disallowed or eliminated."

The menagerie is located in a relatively narrow, highly-used animal-movement corridor between the Bob Marshall Wilderness Complex, Glacier National Park and the surrounding Flathead National Forest. The U.S. Fish & Wildlife Service Grizzly Bear Recovery Coordinator has described this area, relative to grizzly bears, as the "most important linkage area in Montana" (Servheen 2003). This corridor has multi-directional travel, with bears traveling both across and alongside U.S. Highway 2 and Burlington Northern-Santa Fe Railway. This corridor is the site of substantial residential, recreational and commercial development and contains several communities. Also, there is a large resident grizzly bear population in and immediately adjacent to the corridor. While there is a large population of grizzly bears in the area, there is a larger and more extensive population of black bears (Erik Wenum, Pers. Comm., 2003).

Human development along U.S. Highway 2, within the movement corridor, has created a situation where human-bear conflicts are common (Erik Wenum, Pers. Comm., 2003) (Figure 3). From 1995 – 2002 there was a total of 179 management incidents involving both black (65 individuals) and grizzly (7 individuals) bears within a two-mile buffer along U.S. Highway 2 and two miles either direction of the menagerie. These conflicts act to increase bear mortality. USFWS (1993) classifies human-caused grizzly bear mortality into six categories; direct human/bear confrontations, attraction of grizzly bears to improperly stored food and garbage, careless livestock husbandry, protection of livestock, erosion of grizzly bear habitat for economic values, and hunting. All of these factors impinge on the resident and migrant grizzly and black bear populations. Areas of high human/bear contact that result in little negative experience for bears "may remove any barrier of fear or uncertainty that the grizzly bear usually would exhibit toward humans" (USFWS 1993); i.e., habituation. Such habituated bears are more likely to obtain human-derived food and become food-conditioned (USFWS 1993). Females can teach learned behaviors to their cubs, and if unchecked, ultimately "can lead to a shift in the behavior of entire bear populations" (USFWS 1993).

## **ALTERNATIVE A – Proposed Action:**

A5(a) The wildlife movement corridor mentioned above has been identified as a critical habitat component for grizzly bears, linking habitats designated as MSI habitat. While the incremental addition of individual developments may result in minor or immeasurable effects, the gradual deterioration of habitat through the accumulation of impacts can be significant (i.e., cumulative effects). The physical development of the menagerie would likely have a minor negative effect upon critical grizzly bear habitat relative to all other development, past or present, within the movement corridor.

A5(b) Black bears are a game species and there is potential for impacts from the menagerie to affect black bear populations. (Similar issues pertain to grizzly bear, a nongame species.) The habituation and food conditioning of black and grizzly bears from the residential and commercial development in the vicinity of the Kilpatrick menagerie has been documented by MFWP (Erik Wenum, Pers. Comm. 2003) and is visually presented in Figure 3. Also, it is likely that the presence of captive bears may serve as an attractant to wild bears. While there are no data directly addressing this situation, there is abundant literature on the roles of scent marking and olfaction in the social behavior, reproduction, orientation and movements of mammals, including bears and other wild carnivores (Benhamou 1989, Gorman and Trowbridge 1989, Johnson 1973, Müller-Schwarze 1977, Rogers 1987, Seidensticker 1973). Depending on the context, animal scent may serve to attract or deter wild bears. Wild bears that may be attracted to the vicinity of the menagerie are at increased risk of mortality. The individual affect that the menagerie may have as an attractant to bears would likely be minor, but would be cumulative when taking into account the effects of development in the area as a whole. Potential effects can be mitigated through proper storage of food and refuse, daily removal of animal waste, and improved fencing design (see Required Stipulations). Neutering bears only eliminates those chemical attractants of ovarian or testicular origin, and potentially may alter scent-marking behavior as related to reproduction and social dominance.

The ingress or egress of wild or captive bears, respectively, would place wild bears at increased risk of mortality. Trees falling on the perimeter fence could take down the fence and allow wild bears to enter or captive bears to exit. This situation could be mitigated by clearing trees within 20 feet of the perimeter fence and securing a 3/8-inch steel cable to the top of the fence to prevent excessive fence compression should a tree fall on it. In 1997, a black bear escaped from the menagerie through a hole in the perimeter fence. The applicant claimed that the hole was deliberately cut by nearby resident (Kilpatrick 2003b, Pers. Comm.). More adequate fencing (see Required Stipulations) with signs warning about bears and electrified fences may act to deter trespassers.



The knowledge and attitudes of humans towards bears can influence the outcome of human/bear encounters. The bears at the menagerie are socialized to humans, conditioned to non-natural foods, and maintained at a density unlikely to be found in natural situations. Visitors to the menagerie observing bears under these circumstances may not appreciate the danger posed by bears. Such naiveté could lead to tragic bear-human encounters that result in the injury or death of bears and/or humans. This issue could be mitigated by providing visitors with literature that describes the differences between captive menagerie bears and wild bears and that emphasizes the danger that bears, captive or wild, can pose to humans.

- A5(c) Grizzly bears are a non-game species and the effects stated in A5(b) are equally applicable to the grizzly bear.
- A5(d) There is one species of brown bear, *Ursus arctos*, and one species of black bear (*Ursus americanus*). Alternative A would allow for the possession of brown bears, supposedly of European origin and black bears of North American origin (Kilpatrick 2003a). Although the captive bears may have subtle genetic differences from the local bear populations, they do not represent new species for the area.
- A5(e) Unneutered captive bears (black and brown), have the potential to breed with bears in the wild population should they escape from the menagerie or if wild animals should enter into the menagerie. Ingress and egress of animals at the facility is possible. Damage to the perimeter fence caused by falling trees may facilitate ingress or egress of bears. As mentioned under A5(b), a black bear escaped from the menagerie in 1997. Such an escape creates a situation where interbreeding with wild bears can occur. Any interbreeding between captive and wild bears would disrupt the genetic integrity of the local populations. Captive breeding programs can facilitate inbreeding and lead to the accumulation of deleterious alleles. The introduction of any deleterious alleles into the local population could have negative impacts on the population, particularly in the case of the federally-threatened grizzly bear population. Also, the introduction of new genetic material to wild populations from captive bears could potentially affect bear behavior as well. These potential impacts would be mitigated by neutering all captive animals.
- A5(f) The 15-acre enclosure may alter the local movements of individual terrestrial wildlife, forcing them to reroute their daily movement around the perimeter fence. Animals passing through this area may be forced to travel adjacent to US Highway 2 and increase wildlife/vehicle collisions.

- A5(g) The menagerie is unlikely to cause impacts to bald eagles, gray wolves, and Canada lynx. However, the menagerie, without adequate mitigations, could potentially impact wild grizzly bear populations by contributing to direct and indirect mortality, or through the escape of captive animals and subsequent breeding with wild animals (see A5(c) and A5(e)). Wild grizzly bears that may be attracted to the vicinity of the menagerie by the presence of food, trash, or scent of other bears are at increased risk for mortality (e.g., car or train collisions, conflicts with humans). Ingress of any wild grizzly bears into the menagerie would greatly increase the risk of mortality for individual bears. Mitigation measures listed in A5(a) (see Required Stipulations) are applicable here.
- A5(h) A number of conditions can stress wildlife populations. In particular, habitat fragmentation resulting from a variety of land-management practices can have negative impacts on a whole host of wildlife species (Terborg and Winter 1980, Wilcove et al. 1986). Residential and commercial developments in an important wildlife movement corridor contribute to habitat loss, direct and indirect mortality, and ultimately contribute to population declines. The roadside menagerie will contribute to this overall effect by adding to the development that has already occurred in the area. With regards to both grizzly and black bears, the potential attraction, habituation, and food-conditioning can lead to direct and indirect mortality of individuals, which in turn can negatively affect populations of those species. Any interbreeding between captive and wild populations of bears could affect the genetic integrity of local populations. Also, any transmission of diseases from captive bears to wild bears would add additional stress to wild populations. Neutering all captive bears, improved fencing, removal of animal waste, implementation of an adequate veterinary health plan, and proper storage of food and refuse can help mitigate the effects of attraction, interbreeding and disease transmission.
- A5(i) There are a number of diseases that can adversely affect the health of wild and captive bears. Diseases such as rabies, distemper, salmonella, brucellosis, mange, and numerous intestinal parasites and ectoparasites can infect wild and captive bears (Ford 2003, Pers. Comm.). Host population density is a primary factor in the transmission of disease. Consequently, captive animals are at higher risk for disease due to increased contact between individuals. This is particularly important in solitary species, like bears. While accounts of rabies in bears are relatively rare, a bear from the Kilpatrick menagerie was diagnosed with rabies in 1991 and subsequently died (Feldner 2003, Pers. Comm.). It is reported that this bear was infected with rabies prior to being acquired by Mr. Kilpatrick. The potential for these diseases to occur in both wild and captive bears creates a situation where diseases could be transmitted to wild bears from captive bears through direct contact. Such contact could arise from the ingress of wild bears, egress of captive bears or through-the-fence contact between wild and captive bears. In 1997 a black bear escaped from the menagerie. Egress of animals would facilitate the transmission of diseases to wild animals. The potential for disease transmission can be mitigated

by implementation of a sound veterinary health plan, adequate fencing, and measures to minimize attraction of wild bears (see Required Stipulations).

**ALTERNATIVE B – Free-ranging black bears, confined brown bears:**

Under this alternative, black bears would be free to move about the menagerie, while brown bears would be confined to enclosures. Fencing design would be consistent with designs used at other facilities in Montana holding brown bears such as the Grizzly and Wolf Discovery Center in West Yellowstone, Montana, Montana Wildlife Education Inc. in Bozeman, Montana, and Triple D Game Farm in Kalispell, Montana. Those designs include 10 to 12 foot 9 gauge wire fences or cement fences supplemented with electric wires in conjunction with “viewing dry moats” which provide public viewing across a 12 foot deep dry moat. This effectively places another fence between the captive brown bears and wild bears. Alternative B would still result in the minor effects for items a – d and e – i, as identified under Alternative A. However, because of the additional confinement of brown bears, the probability of those effects being realized would be reduced by an unknown amount. The Required Stipulations and recommended mitigations presented under Alternative A would apply to Alternative B.

**ALTERNATIVE C – Free-ranging black bears only, as originally permitted:**

Under this alternative, black bears would be free to move about the menagerie. Since there would be no brown bears at the menagerie, concerns regarding potential interbreeding between captive and wild grizzly bears would no longer apply. However, the potential for interbreeding between wild and captive black bears would persist. Other potential impacts listed under Alternative A would be similar for Alternative C. Required Stipulations and recommended mitigations as listed discussed under Alternative A would apply to Alternative C, with the added stipulation of **no brown bears**.

**ALTERNATIVE D – No Action:**

No wildlife related impacts are expected to occur under the No Action Alternative. However, this area would continue to be used for residential housing and other activities that could contribute to cumulative effects on wildlife.

**Cumulative Effects:**

Any action contributing to the loss of individual grizzly bears (direct or indirect) may represent a cumulative impact to the local population. The menagerie is situated in important grizzly bear habitat, and high rates of human-bear conflicts occur in the vicinity of the menagerie. It is most likely that the immediate short-term effects due to the menagerie are minor. However, any additional attraction of bears, habituation, food-conditioning, disease transmission, or interbreeding would contribute to significant cumulative impacts to the population.

### **Required Stipulations:**

The operation of a roadside menagerie with free-ranging bears of any species is out of compliance with ARM 12.6.1302. To enable Mr. Kilpatrick to operate the menagerie with 6 black bears in 1991, MFWP listed 11 required stipulations that must be followed as part of the conditions of receiving a permit (MFWP 1991). Stipulations 2-11 listed below would be required for Alternatives A and B. However, under alternative C, the menagerie would house only black bears. An additional required stipulation of "No brown bears" (stipulation #1) would be added under this Alternative.

1. **Under Alternative C only**, no brown bears would be allowed.
2. All bears must be sterilized.
3. All bears must be tattooed with a unique code.
4. Food storage must be in odor-proof containers as per USDA APHIS rules.
5. A veterinary-care plan must be developed and implemented, including descriptions of specific vaccination schedules.
6. No road-killed ungulates may be used in the feeding program.
7. All provisions of the roadside zoo and menagerie regulations apply, except for the caging requirements (ARM 12.6.1302).
8. Fencing requirements:
  - a. backup fence energizer, 12-volt system, deep cycle battery.
  - b. Warning signs adequate to protect public if electrical fence system approached from outside of park.
9. Additional fencing requirements (in 1991 these were identified as recommendations):
  - a. Enhance existing fence per recommendations (as per memo from Mike Madel of 6/14/91; see Appendix B), or
  - b. Develop outside perimeter fence and use trained dogs to minimize or prevent bear escapement or entry and human entry or injury.
10. Permit review – annually with revocation rights.

11. Escaped bears – owner liable for damage and/or expenses incurred in capturing escaped bears.

**In addition to the previously Required Stipulations:**

12. Report ingress of any wild bears or egress of captive bears to the Montana DWP immediately. The report must contain the probably reason why or how ingress/egress occurred.

13. Remove bear fecal matter on a daily basis (consistent with ARMs).

**Recommended Mitigation Measures:**

The following management practices would help to minimize impacts to free-ranging wildlife species.

- Current fencing may be inadequate to prevent ingress of wild bears or egress of captive bears. Additional electrified fence arrays, both interior and exterior to the perimeter fence are recommended. Such arrays would consist of alternating hot and ground wires to a height of 48 inches. This design is used by MFWP to secure orchards and apiaries. MFWP can provide details of the design.
- Remove trees within 20 feet of the perimeter fence and secure a 3/8-inch steel cable to the top of the fence to prevent excessive fence compression should a tree fall on it.
- Inspect fences regularly and immediately after events likely to damage fences to ensure integrity. Repair fences as needed.
- Store all trash in odor-proof containers.
- Provide literature to visitors that describes the dangers of both wild and captive bears.
- Train staff to recognize symptoms of diseases to which bears are susceptible.

**References:**

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## **HUMAN ENVIRONMENT**

<b>6. NOISE EFFECTS</b>  <b>Would Alternatives A/B/C result in:</b>	<b>POTENTIAL IMPACT</b>				<b>CAN IMPACT BE MITIGATED</b>	<b>COMMENT INDEX</b>
	<b>UNKNOWN</b>	<b>NONE</b>	<b>MINOR</b>	<b>SIGNIFICANT</b>		
a. Increases in existing noise levels?		A/BC				
b. Exposure of people to severe or nuisance noise levels?		A/BC				

### **Affected Environment:**

Noise is produced by traffic and commercial businesses on Highway 2 adjoining the site. Short-term generation of noise is also associated with the construction of new residences and business along the highway corridor.

### **ALTERNATIVE A – Proposed Action:**

The Proposed Action (Alternative A) consists of a drive-through park occupying approximately 15 acres. The enclosure will eventually house up to ten bears. The primary noise impacts would be short-term effects due to construction of fences, ponds, and roads. Most construction activities have been completed. There are plans to construct a new residence, gift shop, and food handling/storage building.

### **ALTERNATIVE B – Free-ranging black bears, confined brown bears:**

Under Alternative B, brown bears would be confined to cages or enclosures. The primary noise impacts would be short-term effects due to the construction of additional enclosures, cages, and barriers.

### **ALTERNATIVE C – Free-ranging black bears only, as originally permitted:**

Noise impacts related to Alternative C would be similar to those under alternative A.

### **ALTERNATIVE D – No Action:**

No impacts to existing noise levels are expected from the No Action Alternative.

### **Cumulative Effects:**



No cumulative effects on noise levels are anticipated from the proposed project.

**Comments:**

Due to noise currently generated along Highway 2 and construction projects in the area, noise generated at the drive-through menagerie should not cause a problem.

**Required Stipulations:** None

**Recommended Mitigation Measures:** None

## **HUMAN ENVIRONMENT**

7. <b>LAND USE</b>  Would Alternatives A/B/C result in:	POTENTIAL IMPACT				CAN IMPACT BE MITIGATED	COMMENT INDEX
	UNKNOWN	NONE	MINOR	SIGNIFICANT		
a. Alteration of or interference with the productivity or profitability of the existing land use of an area?		A/B/C				
b. Conflict with a designated natural area or area of unusual scientific or educational importance?		A/B/C				
c. Conflict with any existing land use whose presence would constrain or potentially prohibit the Proposed Action?		A/B/C				
d. Conflict with any existing land use that would be adversely affected by the Proposed Action?		A/B/C				
e. Adverse effects on or relocation of residences?		A/B/C				

### **Affected Environment:**

The area hosts a mixture of residential developments and commercial establishments along Highway 2, and is accessible to wild game. The area is zoned as a scenic corridor (Flathead County 2003), which primarily regulates signage along the roadway. Approximately 90% of the menagerie site is forested.

### **ALTERNATIVE A – Proposed Action:**

Up to 10 bears will be housed at the drive-through menagerie under the proposed action (Alternative A). Vegetation at the site has been maintained to provide paying visitors the opportunity to view bears in a somewhat natural habitat. The site has a past history of logging. The lodgepole forest could continue to provide for timber production. There is no conflict with any existing land use or residential development.

**ALTERNATIVE B – Free-ranging black bears, confined brown bears:**

Under Alternative B, all brown bears would be confined in cages at all times. Vegetation at the site could be maintained to allow viewing of bears in somewhat natural surroundings. The site has a past history of logging. The lodgepole forest could continue to provide for timber production. There is no conflict with any existing land use or residential development.

**ALTERNATIVE C – Free-ranging black bears only, as originally permitted:**

Under Alternative C, captive brown bears would not be allowed at the facility under any conditions. Black bears would be allowed under the same conditions as originally permitted in 1991. There is no conflict with any existing land use or residential development.

**ALTERNATIVE D – No Action:**

No adverse impacts to the community would result from the No Action Alternative.

**Cumulative Effects:**

No cumulative impacts on land use are expected from the proposed project.

**Comments:**

No mitigation measures are recommended.

**References:**

**Flathead County Zoning Maps, 2003.** Reviewed online from Internet. March 28, 2003.

## **HUMAN ENVIRONMENT**

<b>8. <u>RISK/HEALTH HAZARDS</u></b>	<b>POTENTIAL IMPACT</b>				<b>CAN IMPACT BE MITIGATED</b>	<b>COMMENT INDEX</b>
	<b>Would Alternatives A/B/C result in:</b>	<b>UNKNOWN</b>	<b>NONE</b>	<b>MINOR</b>	<b>SIGNIFICANT</b>	
a. Risk of dispersal of hazardous substances (including, but not limited to chemicals, pathogens, or radiation) in the event of an accident or other forms of disruption?				A/B/C		A8(a), B8(a)
b. Creation of any hazard or potential hazard to domestic or alternative livestock ?				A/B/C	Yes	A8(b), B8(b)
c. Creation of any hazard or potential hazard to human health?				B/C	A No - A Yes - B, C	A8(c), B8(c)

### **Affected Environment:**

The Kilpatrick Roadside Menagerie is located in an area that is important bear habitat and frequently used by both black and grizzly bears. Human development along US Highway 2 creates an environment conducive to attracting bears searching for food. Human-derived attractants include food (human, pet, bird), refuse, fruit orchards, and apiaries. Bears can become habituated to humans and human-derived food sources, leading to frequent human-bear interactions. Such interactions increase risks to human safety. MFVP is actively working with residents, businesses and communities in the area to prevent or minimize sources of food and refuse that attract bears. MFVP biologists assist orchard and apiary owners with electrified fencing designs to deter bears. Also, a problem trash-collection site (green collection bins) was moved from an unsecured site to a new site with secured fencing to prevent bears from accessing the trash (Erik Wenum 2003, Pers. Comm.).

Bears can be reservoirs of a number of diseases transmissible to humans (Ford 2003, Pers. Comm.), including viral, bacterial, and parasitic diseases. In 1991, a black bear at the Kilpatrick Menagerie was diagnosed with rabies and subsequently died (Feldner 2003, Pers. Comm.). Fortunately, no humans contracted rabies from this bear.

### **ALTERNATIVE A – Proposed Action:**

A8 (a) If captive bears become infected with diseases of human or animal health concern, those bears would typically serve to disperse those pathogens in the environment [see A8(b)]. If an infected bear were to escape from the menagerie or infect a wild animal, then those pathogens would be further dispersed in the environment. The ability of a given pathogen to survive in the

environment, outside of its normal host, depends on several environmental variables. In moist soil, roundworm and tapeworm ova may persist for years. Dispersal of pathogens could be mitigated by improved fencing design that would minimize the potential for egress of captive animals (see Required Stipulations under Section 5). Routine health screening, vaccination, and worming of the bears along with removal and proper disposal of animal waste would minimize the potential for pathogen dispersal.

We are not aware of any stores of chemicals or other hazardous substances at the menagerie.

A8 (b) Bears are susceptible to diseases that are transmissible to livestock and alternative livestock, including brucellosis (Cheville et al. 1998), tuberculosis (Bunning-Fann et al. 1998), and rabies (Ford 2003, Pers. Comm). While transmission of these diseases to livestock is unlikely, the potential does exist if captive bears were to become infected or if bears were acquired with pre-existing infections. There is one documented case of Mr. Kilpatrick acquiring a black bear infected with rabies in 1991 (Feldner 2003, Pers. Comm). The risk of transmission of diseases from captive bears to livestock or alternative livestock would be minimal if adequate fencing is installed, the integrity of the fencing maintained, and sound veterinary health plan is implemented. In addition, Montana Department of Livestock regulations regarding the importation of animals into Montana and USDA regulations pertaining to maintenance of animal health should be followed. Failure to comply with these requirements would be grounds for license revocation.

A8(c) Zoonotic diseases are diseases of wildlife that are transmissible to humans. Bears are susceptible to several zoonoses, including rabies, tuberculosis, brucellosis, Salmonella and tularemia (Auerbach, 1999; Bunning-Fann et al. 1998; Cheville et al 1998; Ford 2003, Pers. Comm.) Such diseases pose a threat to menagerie staff and visitors. Also, the public at large would be at risk if an infected animal should escape from the menagerie or if a disease like rabies would be transmitted from a captive animal to a wild animal. Bears are also susceptible to canine distemper. The symptoms of canine distemper and rabies are similar, with infected animals exhibiting abnormal behavior, often approaching humans. Captive or wild bears infected with either of these diseases are a significant threat to human health. Implementing a sound veterinary health plan that includes routine screening for zoonotic diseases of public health importance and vaccinating captive bears, when effective vaccines are available can mitigate risks to public health (see Required Stipulations under Section 5 – Fish/Wildlife). Daily removal of animal waste will help minimize the transmission of diseases among captive animals and to other wildlife (e.g., rodents). Staff cleaning up animal waste should wear rubber or plastic gloves and wash their hands following waste disposal. Improved fence design that reduces the potential for contact between visitors and captive bears, and between captive and wild bears would further

minimize risks to public health. On site quarantine facilities should be available to house diseased animals or animals exhibiting abnormal behavior. Staff/volunteers working with captive bears could be provided rabies vaccinations to prevent accidental infection. Rabies vaccinations are recommended for staff working with bears at the Grizzly Bear and Wolf Discovery Center, West Yellowstone, MT (Ford 2003, Pers. Comm.). Additionally, staff/volunteers should receive training in appropriate handling techniques and trained to recognize the symptoms of various diseases of animal and public health significance.

Captive bears, regardless of socialization with humans and conditioning, do pose a safety hazard to humans. Menagerie staff working with the bears and visitors are exposed to some level of safety risk. Bears, especially brown bears, are very powerful animals and current fences at the menagerie pose little impediment to a bear that decides to breach a fence. The brown bears currently residing at the facility are sub-adults and have reached less than 50% of their adult size and weight. In addition, the brown bear species (*Ursus arctos*) has fundamental behavioral differences in relationship to a black bear, which may increase the potential risks to human safety in some situations. In 1997, a black bear escaped from the menagerie through a hole in the perimeter fence, demonstrating that accidental escape can occur. Along the perimeter fence there is a buffer (c.a. 10 feet) sufficient to drive a pickup truck. This buffer is inadequate to prevent trees from falling and compromising the integrity of the fence. Fallen trees could allow ingress or egress of wild or captive bears, respectively, which would pose a significant risk to human safety. Any captive bears that escape the menagerie would pose a public safety hazard. Similarly, any wild bear attracted to the menagerie and/or breaching the menagerie fence would pose a hazard to public safety. Most safety risks can be mitigated by constructing improved fencing that minimizes the potential for contact between visitors and captive bears (see Required Stipulations under Section 5 – Fish/Wildlife). Additional electrified fence arrays internal and external to the perimeter fence would minimize the potential for ingress and egress of wild and captive bears, respectively. However, the potential for physical harm to staff and the public from brown bears under Alternative A would not be mitigated.

The Kilpatrick Menagerie requires visitors to remain in vehicles with the windows closed while driving through the menagerie. Visitors are allowed to open their car windows in sections of the motor path where fences are intended to discourage bears from approaching vehicles. According to Mr. Kilpatrick (2003b, Pers. Comm.) occasional visitors fail to comply with menagerie rules and open their car windows. Additionally, the captive bears are socialized with humans, are conditioned, and fed a combination of natural and unnatural foods. Under these conditions the captive bears are unlikely to behave like wild bears with respect to humans. Visitors viewing bears in such a setting may expect wild bears to behave similarly and place themselves at risk during an encounter with wild bears. Educational materials could be

provided to visitors and staff/volunteer explaining that bears are dangerous animals, regardless of socialization and training.

**ALTERNATIVE B – Free-ranging black bears, confined brown bears:**

- 8B(a) Under Alternative B, brown bears are confined to cages and black bears are free-ranging within the menagerie. The potential for dispersal of pathogens in the environment would be similar to that under Alternative A. Stipulations and mitigation measures listed under Alternative A (also, see Section 5 – Fish/Wildlife) apply to this Alternative.
- 8B(b) Under Alternative B, the potential for transmission of diseases to which domestic or alternative livestock are susceptible remains the same, since black bears would be free-ranging within the menagerie. There remains some level of risk should a captive bear become infected with a disease and then escape. Additional mitigation measures mentioned in A8(b) would further minimize risk of any hazard to domestic or alternative livestock (see Required Stipulations under Section 5 – Fish/Wildlife).
- 8B(c) Under Alternative B, the potential for contact between visitors and captive brown bears is greatly reduced due to confinement of brown bears and additional fencing that further precludes contact between visitors and brown bears. However, black bears would be free-ranging. Menagerie staff would still be exposed to increased safety risk. The mitigation measures identified in A8(c) would further minimize human safety risks under Alternative B.

**ALTERNATIVE C – Free-ranging black bears only, as originally permitted:**

With the exclusion of captive brown bears from the menagerie, there is a concomitant reduction in safety risk due to captive bear-human conflict. However, free-ranging black bears continue to pose some level of safety risk. Potential impacts are similar to those listed under Alternative A. Required Stipulations and mitigation measures identified under Alternative A would apply to this alternative.

**ALTERNATIVE D – No Action:**

Risk/health hazards would not occur from the No Action Alternative.

**Cumulative Effects:**

No additional impacts from past, present or reasonably foreseeable activities near the menagerie are anticipated.

## **Comments:**

### **Required Stipulations:**

Stipulations included in Section 5 (*Fish/Wildlife*) are applicable to this section.

### **Recommended Mitigation Measures:**

- Mitigation measures included in Section 5 (*Fish/Wildlife*) are applicable to this section.
- Vaccination of staff against rabies virus may be warranted.
- Train staff to recognize symptoms of diseases to which bears are susceptible.
- Staff should wear gloves while cleaning up animal waste and wash hands when finished.

## **References:**

**Auerbach, P.S. 1999.** Medicine for the outdoors. Lyons Press. 499pp.

**Bruning-Fann, C., M. Chaddock, T. Cooley, J. Fierke, P. Friedrich, J. Lipe, S. Schmitt, M. Vanderklok, and N. Zael.** Northwest Michigan surveillance activities for bovine tuberculosis in the livestock and free-ranging deer populations. Michigan Department of Agriculture, North Lansing, MI. September 1998.

**Cheville, N.F., D.R. McCullough, L.R. Paulson, N. Grossblatt, K. Iverson, and S. Parker. 1998.** Brucellosis in the greater Yellowstone area. National Academy of Sciences, National Academy Press. <http://www.nap.edu/books/0309059895/html/>

**Feldner, T. 2003.** Montana Department of Fish, Wildlife and Parks, Commercial Wildlife Permitting. Personal communication with Pete Feigley, Maxim Technologies, March 31, 2003.

**Ford, G. 2003.** Grizzly Bear and Wolf Discovery Center Veterinarian. Personal communication with Pete Feigley, Maxim Technologies, March/April 2003.

**Kilpatrick, R.A., 2003b.** Applicant, personal communication with Pete Feigley, Maxim Technologies, Inc., Helena, MT. March 26.

**Wenum, E. 2003.** Montana Department of Fish, Wildlife and Parks, Biologist. Personal Communication with Pete Feigley, Maxim Technologies, March 26, 2003.



## **HUMAN ENVIRONMENT**

9. <b><u>COMMUNITY IMPACT</u></b> Would Alternatives A/B/C result in:	POTENTIAL IMPACT				CAN IMPACT BE MITIGATED	COMMENT INDEX
	UNKNOWN	NONE	MINOR	SIGNIFICANT		
a. Alteration of the location, distribution, density, or growth rate of the human population of an area?		A/B/C				
b. Alteration of the social structure of a community?		A/B/C				
c. Alteration of the level or distribution of employment or community or personal income?		A/B/C				
d. Changes in industrial or commercial activity?		A/B/C				
e. Changes in historic or traditional recreational use of an area?		A/B/C				
f. Changes in existing public benefits provided by affected wildlife populations and wildlife habitats (educational, cultural or historic)?			A/B/C		Yes	A9(f)
g. Increased traffic hazards or effects on existing transportation facilities or patterns of movement of people and goods?		A/B/C				

### **Affected Environment:**

The area hosts a mixture of residential developments and commercial establishments along Highway 2. The Kilpatrick property is bordered by the Glacier's Mountain Resort to the north and the Sundance Campground to the south and southeast. To the west, across Highway 2, is the North American Wildlife Museum. According to Mr. Kilpatrick (2003b, Pers. Comm.), there are no paid employees at the menagerie. Staff at the menagerie is all-volunteer. An intended purpose of the menagerie is to provide an opportunity for the public to view bears in a natural-like environment, which may provide some educational benefit.

### **ALTERNATIVE A – Proposed Action:**

Up to 10 bears will be housed at the drive-through menagerie under the proposed action (Alternative A). Mr. Kilpatrick operates the facility with the assistance of several volunteer trainers. There are no plans to hire employees at the facility, so there is no reason to expect that the expanded menagerie would attract new workers to the area. Visitors attracted to the menagerie may linger in the community and provide additional business to nearby commercial establishments. There are no anticipated impacts according to evaluation criteria a-e, and g.

A9(f) There is inherent educational benefit for public being able to view wildlife, including bears. The Kilpatrick menagerie would provide some level of educational benefit. However, bears at the menagerie are socialized to humans, conditioned to non-natural foods, and maintained at a density unlikely to be found in natural situations. Behavior exhibited by the captive bears is unlikely to be representative of the behavior of wild bears. Visitors to the menagerie may not recognize this difference and the danger posed by bears (see Section 5 – Fish/Wildlife). This issue could be mitigated by providing visitors with literature that describes the differences between the menagerie bears and wild bears and that emphasizes the danger that bears, captive or wild, can pose to humans.

**ALTERNATIVE B – Free-ranging black bears, confined brown bears:**

The potential impacts to the community resulting from Alternative B would be similar to those under Alternative A.

**ALTERNATIVE C – Free-ranging black bears only, as originally permitted:**

The potential impacts to the community resulting from Alternative C would be similar to those under Alternative A.

**ALTERNATIVE D – No Action:**

No adverse impacts to the community would result from the No Action Alternative.

**Cumulative Effects:**

No cumulative impacts are anticipated on communities from operation of the drive-through menagerie.

**Comments:**

**Recommended Mitigation Measures:**

- Provide visitors literature describing the dangers that bears pose to humans and the differences between captive and wild bears.

**References:**

**Kilpatrick, R.A., 2003b.** Applicant, personal communication with Pete Feigley, Maxim Technologies, Inc., Helena, MT. March 26.

## **HUMAN ENVIRONMENT**

10. <b><u>PUBLIC SERVICES &amp; TAXES</u></b>	POTENTIAL IMPACT				CAN IMPACT BE MITIGATED	COMMENT INDEX
	UNKNOWN	NONE	MINOR	SIGNIFICANT		
Would Alternatives A/B/C result in:						
a. A need for new or altered government services (specifically an increased regulatory role for MFVP?)			A/B/C			A10(a)
b. A change in the local or state tax base and revenues?		A/B/C				A10(b)
c. A need for new facilities or substantial alterations of any of the following utilities: electric power, natural gas, other fuel supply or distribution systems, or communications?		A/B/C				A10(c)

### **Affected Environment:**

The bear menagerie is located on three adjoining tracts of land owned by the applicant. Property taxes are assessed on these tracts (Zanon, 2003). The menagerie does not hire paid employees. All staff are volunteers (Kilpatrick 2003b, Pers. Comm.).

### **ALTERNATIVE A – Proposed Action:**

A10(a) Up to 10 bears will be housed at the drive-through menagerie under the proposed action (Alternative A). MFVP personnel would respond to any complaints about the menagerie or egress/ingress problems. MFVP staff would also be required to provide occasional inspections of the facility. Since MFVP does not have the option of hiring additional employees to handle any increase in workload, the current staff would need to be re-prioritized to meet any increased need for services.

A10(b) An increase in property values may result from further development of the facility, which may result in a corresponding increase in property taxes to support government services. Since there are no paid employees, there would be no increase in tax revenues due to increased employment opportunities.

A10(c) There would be no additional demand on utilities.

**ALTERNATIVE B – Free-ranging black bears, confined brown bears:**

Under Alternative B, the brown bears would be confined in cages at all times. Similar to the proposed action (Alternative A), tax revenues may increase if improvements to the facility are implemented.

**ALTERNATIVE C – Free-ranging black bears only, as originally permitted:**

Under Alternative C, only captive black bears would be allowed at the menagerie. Similar to the proposed action (Alternative A), tax revenues may increase if improvements to the facility are implemented.

**ALTERNATIVE D – No Action:**

Under the No Action Alternative, the county and state would continue to assess property taxes for the tracts.

**Cumulative Effects:**

Further human development of the Flathead Valley increases the potential for interactions between people and wildlife, requiring greater expenditure of resources by MFWP.

**Comments:** No mitigation measures are recommended.

**References:**

**Geri Zanon, 2003.** Flathead County Tax Department, personal communication with Chris Cronin, Maxim Technologies, Inc., Helena, MT. March 28, 2003.

**Kilpatrick, R.A., 2003b.** Applicant, personal communication with Pete Feigley, Maxim Technologies, Inc., Helena, MT. March 26, 2003.

## **HUMAN ENVIRONMENT**

<b>II. <u>AESTHETICS/RECREATION</u></b>  <b>Would Alternatives A/B/C result in:</b>	<b>POTENTIAL IMPACT</b>				<b>CAN IMPACT BE MITIGATED</b>	<b>COMMENT INDEX</b>
	<b>UNKNOWN</b>	<b>NONE</b>	<b>MINOR</b>	<b>SIGNIFICANT</b>		
a. Alteration of any scenic vista or creation of an aesthetically offensive site or effect that is open to public view?		A/B/C				
b. Alteration of the aesthetic character of a community or neighborhood?		A/B/C				
c. Alteration of the quality or quantity of recreational/tourism opportunities and settings?			A/B/C positive			All(c)

### **Affected Environment:**

The site is predominantly forested, with residences, a campground, a tourist resort, and other commercial establishments nearby. Based on the presence of residences and Highway 2 in the immediate vicinity, existing hunting and recreational opportunities in the immediate area of the site are limited.

### **ALTERNATIVE A – Proposed Action:**

The facility is intended to provide recreational and educational opportunities to paying visitors who will be able to view bears in a somewhat natural habitat and observe bear behavior and social interactions (Kilpatrick 2003b, Pers. Comm.). Bears will be able to move about the compound while visitors travel through the menagerie in their automobiles. The location is near Glacier National Park and takes advantage of opportunities to attract travelers and tourists during late spring, summer, and early fall seasons. There are no anticipated negative impacts to the aesthetic and recreational values of the area.

All(c) It is anticipated that Alternative A would have a minor positive effect of increasing recreation and tourism opportunities in the area.

### **ALTERNATIVE B – Free-ranging black bears, confined brown bears:**

Anticipated impacts under Alternative B are similar to those under Alternative A.

**ALTERNATIVE C – Free-ranging black bears only, as originally permitted:**

Anticipated impacts under Alternative C are similar to those under Alternative A.

**ALTERNATIVE D – No Action:**

No adverse impacts are expected under the No Action Alternative.

**Cumulative Effects:**

No cumulative impacts are expected.

**Comments:**

No mitigation measures are recommended.

**References:**

**Kilpatrick, R.A., 2003b.** Applicant, personal communication with Pete Feigley, Maxim Technologies, Inc., Helena, MT. March 26.

## **HUMAN ENVIRONMENT**

12. <b><u>CULTURAL &amp; HISTORICAL RESOURCES</u></b>	POTENTIAL IMPACT				CAN IMPACT BE MITIGATED	COMMENT INDEX
	UNKNOWN	NONE	MINOR	SIGNIFICANT		
Would Alternatives A/B/C result in:						
a. Destruction or alteration of any site, structure or object of prehistoric, historic, or paleontological importance?	A/B/C				Yes	12(a)
b. Physical change that would affect unique cultural values?		A/B/C				
c. Effects on existing religious or sacred uses of a site or area?		A/B/C				

### **Affected Environment:**

A cultural resource file search was conducted by the State Historic Preservation Office (SHPO) during February 2003. There are no previously recorded historic sites in the area.

### **ALTERNATIVE A – Proposed Action:**

- 12(a) According to SHPO (2003), the absence of recorded historic sites in the area does not mean that they do not exist, but rather may reflect the absence of any previous cultural resource inventory including the site. As a result, there is a possibility of unknown or unrecorded cultural features at the site.

### **ALTERNATIVE B – Free-ranging black bears, confined brown bears:**

Any impacts to cultural and historical resources would be similar to those described under Alternative A.

### **ALTERNATIVE C – Free-ranging black bears only, as originally permitted:**

Any impacts to cultural and historical resources would be similar to those described under Alternative A.

**ALTERNATIVE D – No Action:**

No impacts to cultural resources are expected from the No Action Alternative unless other disturbances occur within the property.

**Cumulative Effects:**

No cumulative effects on cultural or historic resources are anticipated.

**Comments:** None.

**Recommended Mitigation Measures:**

- If archeological artifacts are observed during construction of the alternative livestock fence or from other activities, work should stop in the area and the discovery reported to:

Montana Historical Society  
Historic Preservation Office  
1410 8th Avenue; P.O. Box 201202  
Helena, Montana 59620  
(406) 444-7715

If work stoppage in the area containing observed artifacts is not possible, record the location and position of each object, take photographs and preserve the artifact(s).

**References:**

**Montana State Historic Preservation Office (SHPO), 2003.** Letter from Damon Murdo, SHPO to Peter Feigley, Maxim Technologies, Inc., dated February 26, 2003.



## SUMMARY

13. <u>SUMMARY</u>  Would the Alternatives A/B/C, considered as a whole:	POTENTIAL IMPACT				CAN IMPACT BE MITIGATED	COMMENT INDEX
	UNKNOWN	NONE	MINOR	SIGNIFICANT		
a. Have impacts that are individually limited, but cumulatively considerable? (A project or program may result in impacts on two or more separate resources which create a significant effect when considered together or in total)				A/B/C	Yes	A13(a), B13(a), C13(a)
b. Involve potential risks or adverse effects which are uncertain but extremely hazardous if they were to occur?				A/B/C	No - A Yes - B,C	A13(b), B13(b), C13(b)
c. Potentially conflict with the substantive requirements or any local, state, or federal law, regulation, standard or formal plan?			B/C	A	No	A13(c), B13(c), C13(c)
d. Establish a precedent or likelihood that future actions with significant environmental impacts would be proposed?			B/C	A	No	A13(d), B13(d), C13(d)
e. Generate substantial debate or controversy about the nature of the impacts that would be created?		C	A/B		Yes	A13(e), B13(e), C13(e)

### ALTERNATIVE A – Proposed Action:

A13(a) Many of the potential impacts to wildlife were identified to be minor, yet they are important when added to other impacts occurring from other sources. The menagerie is located in a wildlife movement corridor within an area designated as critical habitat for grizzly bears. The addition of the menagerie to the area results in only a minor amount of habitat loss. However, when added to the mix of commercial and residential development that has occurred in the past or is likely to occur in the future, the overall effect of development becomes significant. This is also the case for the potential attraction of black bears and grizzly bears to the vicinity of the menagerie. Bears may be attracted to the facility by the presence of captive black and brown bears or the odor of food. Yet along Highway 2 and areas neighboring the menagerie are numerous accessible trash containers and other sources of attraction. The individual effect of the menagerie may be minor in comparison to the existing attractants. But in aggregate, the combined effect of all sources of attraction is significant and is evident in the number of bear

management incidents seen in Figure 3. Required Stipulations minimize the impacts attributable to the menagerie (see Stipulations listed in Section 5 – Fish/Wildlife).

A13(b) There is an undetermined but possibly significant potential of captive bears to become infected with diseases to which other wildlife or humans are susceptible. For example, if a captive bear becomes infected with rabies, the potential health risks to menagerie staff or visitors resulting from exposure to the rabies virus are significant, as are the potential risks to wild bears, if exposed. Similarly, public safety risks from an ingress or egress of captive or wild bears are potentially significant. Required Stipulations would mitigate the potential risks for exposure to disease transmission. However, potential safety hazards from physical injury from brown bears are not mitigated under Alternative A. Bears, especially brown bears, are very powerful animals and current fences at the menagerie pose little impediment to a bear that decides to breach a fence. The brown bears currently residing at the facility are sub-adults and have reached less than 50% of their adult size and weight. In addition, the brown bear species (*Ursus arctos*) has fundamental behavioral differences in relationship to a black bear, which may increase the potential risks to human safety in some situations.

A13(c) Under Alternative A, the operation of a drive-through menagerie with free-ranging bears would be in conflict with the existing Administrative Rules of Montana, Sub-Chapter 13. While the risks associated with Alternative A can be mitigated through the implementation of stipulations, the actual conflict with the regulations cannot. Permitting the Proposed Action with Required Stipulations would set establish a precedent as described in A13(d).

A13(d) If permitted for Alternative A, the Kilpatrick roadside menagerie would allow for visitors to travel through a facility with free-ranging black bears and brown bears. This situation deviates from the regulations as specified in the Administrative Rules of Montana (ARM), Sub-Chapter 13 – Roadside Zoo Regulations (ARM 12.6.1301 through 12.6.1309). Permitting the proposed action for brown bears would establish a precedent that may encourage similar commercial operations. MFWP has been willing to allow for such a deviation for black bears contingent upon implementing specified stipulations and mitigation measures. The following issues are of greatest concern:

- Ingress or egress of wild or captive bears, respectively and resultant health and safety risks to humans and captive and wild bears. Free-ranging bears within the facility are potentially more likely to attract wild bears and more likely to breach a fence.
- The presence of free-ranging captive brown bears within the facility poses risks to populations of conspecific grizzly bears in the area, which are a federally-threatened species.

If captive brown bears escape the facility, there is potential for interbreeding, which could compromise the genetic integrity of the local population. Egress of any captive bear that may be infected with a transmissible disease places the wild grizzly population at risk.

- Inadequate perimeter and interior fences increases the potential for egress and ingress.

A13(e) Implementation of Alternative A (Proposed Action) can potentially generate substantial controversy about the nature of the impacts because those impacts are contingent upon other events that may or may not be detectable. The potential for wild grizzly bears to be attracted to the menagerie as a result of odors emanating from food, trash, or other bears is a distinct possibility. However, attributing the presence of wild bears at or near the menagerie to menagerie-related attractants when there are so many other attractants in the area is virtually impossible. The cumulative nature of such impacts will generate controversy. Simply housing conspecific brown bears in critical grizzly bear habitat is, in itself, controversial.

**ALTERNATIVE B – Free-ranging black bears, confined brown bears:**

B13(a) Cumulative impacts under Alternative B are considered to be similar to those of Alternative A.

B13(b) The risks to public and animal health under Alternative B are similar to those under Alternative A. However, the additional confinement of brown bears and fencing that would be required under Alternative B lowers the safety risk from brown bears relative to Alternative A.

B13(c) Under Alternative B the menagerie would follow existing Administrative Rules for brown bears, but not for black bears. Black bears would be maintained under the same constraints as identified under the initial licensing for a drive-through black-bear facility. Permitting Alternative B, with Required Stipulations (see Section 5 – Fish/Wildlife) would not establish a precedent for future actions requesting brown bears in a potential public contact situation.

B13(d) Under Alternative B, the menagerie would not follow existing administrative rules as they pertain to black bears. That precedent has already been set with the initial licensing of Mr. Kilpatrick for the drive-through black bear facility. Required Stipulations listed under Section 5 (Fish/Wildlife) must be followed.

B13(e) Potential impacts under Alternative B are similar to those under Alternative A.

**ALTERNATIVE C – Free-ranging black bears only, as originally permitted:**

Under Alternative C, brown bears would be prohibited. This would eliminate any controversy surrounding the housing of captive brown bears in the middle of important grizzly bear habitat. However, other potential impacts as described under Alternative A would apply to Alternative C. Required Stipulations listed under Section 5 (Fish/Wildlife) must be followed.

C13(a) The potential for cumulative impacts under Alternative C would be the same as under Alternative A. The Required Stipulations as specified under Section 5 (Fish/Wildlife) must be followed to mitigate these impacts.

C13(b) The absence of brown bears under this Alternative would reduce human safety risk. However, the potential risks posed by black bears and the potential for exposure to diseases remains similar to that identified under Alternative A. Required Stipulations would mitigate the potential risks.

C13(c) Alternative C would conflict with the existing Administrative Rules. However, stipulations were placed on the original permit to mitigate for the conflict. Under Alternative C, the Required Stipulations must be followed.

C13(d) Under Alternative C the menagerie would not follow existing administrative rules as they pertain to black bears. However, the precedent has already been set with the initial licensing of Mr. Kilpatrick for the drive-through black bear facility. Required Stipulations listed under Section 5 (Fish/Wildlife) must be followed.

C13(e) Since Alternative C follows the conditions under which the menagerie was originally permitted, with the exception of the increase in size (i.e., 15 acres), it is unlikely that this Alternative would result in substantial debate or controversy.

#### **ALTERNATIVE D – No Action:**

The No Action Alternative would result in no potential impact according to the evaluation criteria.

#### **Cumulative Effects:**

Cumulative impacts would occur with Alternatives A, B, and C, as described in A13(a).

**Comments:**

**Required Stipulations:**

All Required Stipulations as described in Section 5 must be followed.

**Recommended Mitigation Measures:**

All mitigation measures identified in Sections 5 and 8 are recommended.

### **PART III. EA CONCLUSION**

**1. Based on the significance criteria evaluated in this EA, is an EIS required? YES / NO**

An EIS would not be required for the Kilpatrick Roadside Menagerie for Alternatives B and C. The appropriate level of analysis for the Alternatives B, and C is a mitigated EA because all impacts of the Alternatives have been accurately identified in the EA, and all identified significant impacts would be mitigated to minor or none. Impacts resulting from Alternative A (Proposed Action), however, have been identified and cannot be mitigated under the proposed alternative. Under Alternative A, an EIS would be required.

**2. Describe the level of public involvement for this project if any and, given the complexity and the seriousness of the environmental issues associated with the Proposed Action, is the level of public involvement appropriate under the circumstances?**

A public scoping meeting was held on March 26, 2003 at 7:00 pm at MFWP Region I Office. This meeting helped to identify substantive issues to be described in this EA. Upon completion of the Draft EA, a notice will be sent to local newspapers and other potentially affected interested parties explaining the project and asking for input during a 20-day comment period. The comment period extends from April 18, 2003 until 5:00 pm May 6, 2003. The Draft EA is available to the public at the following locations: MFWP office in Kalispell at the address and phone number listed below, Flathead County Library at Kalispell and Columbia Falls, and through the State Bulletin Board System during the public comment period.

Send written comments to:

Ms. Nancy Ivy  
Montana FWP, Region I  
490 North Meridian Road, Kalispell 59901  
Email comments: nivy@state.mt.us

**3. Duration of comment period if any: 20 days**

**4. Name, title, address and phone number of the Person(s) Responsible for Preparing the EA:**

**Fish, Wildlife & Parks**

Tim Feldner, Commercial Wildlife Permitting  
1420 East Sixth Ave, PO Box 2000701  
Helena, MT 59620-0701  
(406) 444-4039

Jim Williams, MFWP Region I Wildlife Biologist  
490 North Meridian Road  
Kalispell, MT 59901  
(406) 751-4585

Erik Wenum, MFWP Region I Wildlife Biologist  
490 North Meridian Road  
Kalispell, MT 59901  
(406) 751-4588

**Maxim Technologies, Inc.**

Daphne Digrindakis, Project Manager  
Pete Feigley, Ph.D., Senior Biologist  
Chris Cronin, Environmental Scientist.

## **APPENDIX A**

### **MONTANA STATUTES RELATED TO THE REGULATION OF ROADSIDE ZOOS AND MENAGERIES**



**87-4-80144. Definitions.** As used in this part unless the context requires otherwise, the following definitions apply:

(1) "Roadside menagerie" means any place where one or more wild animals, including birds, reptiles, and the like, are kept in captivity for the evident purpose of exhibition or attracting trade, on or off the facility premises. It does not include the exhibition of any animal by an educational institution or by a travelling theatrical exhibition or circus based outside of Montana.

(2) "Wild animal" means an animal that is wild by nature as distinguished from the common domestic animals, whether the animal was bred or reared in captivity, and includes birds and reptiles.

(3) "Wild animal menagerie" means any place where one or more bears or large cats, including cougars, lions, tigers, jaguars, leopards, pumas, cheetahs, ocelots, and hybrids of those large cats are kept in captivity for use other than public exhibition.

(4) "Zoo" means any zoological garden chartered as a nonprofit corporation by the state or any facility participating in the American zoo and aquarium association accreditation program for the purpose of exhibiting wild animals for public viewing.

History: En. Sec. 1, Ch. 130, L. 1969; amd. Sec. 45, Ch. 511, L. 1973; R.C.M. 1947, 26-1205; amd. Sec. 2, Ch. 322, L. 1999.

**87-4-802. Department regulations.** The department shall adopt and enforce reasonable regulations for the housing, care, treatment, feeding, and sanitation of animals kept in roadside menageries, wild animal menageries, and zoos, for the protection of the public from injury by those animals, and for the licensing of roadside menageries, wild animal menageries, and zoos.

History: En. Sec. 2, Ch. 130, L. 1969; amd. Sec. 13, Ch. 417, L. 1977; R.C.M. 1947, 26-1208(2); amd. Sec. 3, Ch. 322, L. 1999.

**87-4-803. Permits.** (1) The department may grant permits for roadside menageries, wild animal menageries, and zoos. It is unlawful for any person to operate a roadside menagerie or wild animal menagerie without a permit. Application for a permit must be made to the director on a form prescribed by the director. The annual permit fee for five or less animals is \$10. The annual permit fee for more than five animals is \$25. Permits expire on December 31 but may be renewed upon payment of the annual fee and submission of a renewal application. This section does not apply to the United States, the state of Montana, or any county or city. A person who subscribes to any false statement in application for a permit is guilty of a misdemeanor and may be denied a permit.

(2) (a) A permit application for a roadside menagerie must include:

- (i) the applicant's name and address;
- (ii) the exact location of the facility;
- (iii) a list of species and the number of animals to be held in the facility;
- (iv) the type of facility contemplated, including cage specifications;
- (v) a copy of all required federal permits for exhibition of wild animals; and
- (vi) a copy of a liability insurance policy to cover bodily injury or property damage.

(b) A permit application for a wild animal menagerie must include:

- (i) the applicant's name and address;

- (ii) the exact location of the facility, together with the nature of the applicant's title to the land, whether in fee, under lease, by contract for deed, or otherwise;
- (iii) a list of species and the number of animals to be held in the facility;
- (iv) the type of facility contemplated, including cage specifications; and
- (v) information demonstrating that the applicant is responsible.
- (c) A permit application for a zoo must include:
  - (i) the applicant's name and address;
  - (ii) the exact location of the facility;
  - (iii) a copy of the nonprofit corporation documents approved by the secretary of state's office;
  - (iv) a copy of the required federal permits for exhibition of wild animals; and
  - (v) if applicable, a copy of the American zoo and aquarium association accreditation program specific to the facility.
- (3) Renewal applications for roadside menageries and wild animal menageries must include an accounting of all wild animals on the facility.
- (4) A permit may not be granted by the department until it has satisfactorily verified that the provisions for housing and caring for the animals and for protecting the public are proper and adequate and in accordance with the standards established by the department.
- (5) A permit is not transferable to another person.

History: En. Secs. 2, 3, Ch. 130, L. 1969; amd. Sec. 13, Ch. 417, L. 1977; R.C.M. 1947, 26-1206(1), 26-1207; amd. Sec. 4, Ch. 322, L. 1999.

**87-4-804. Permit to obtain wild animals.** (1) It is unlawful to obtain wild animals for a roadside menagerie, wild animal menagerie, or zoo by capture from the wild or by purchase except as authorized by the department in accordance with the terms of a permit.

- (2) Application for a capture permit may be made only by a zoo and must be made to the director on a form prescribed by the director. After investigation by the department, the director may issue a capture permit without charge if the director finds:
  - (a) that all provisions of this part and of the department regulations are complied with by the applicant; and
  - (b) that the number and species of wildlife desired is not excessive under the circumstances.
- (3) If wild animals are to be obtained by capture for use in zoos, the permit must designate the number and the means of capture, but ownership of the wild animals captured shall remain in the state of Montana.
- (4) Roadside menageries, wild animal menageries, and zoos may obtain captive-bred wild animals from a licensed zoo, menagerie, alternative livestock ranch, fur farm, game bird farm, or animal rehabilitation center.
- (5) Wild animals may be bought, sold, or transferred under regulations that the department prescribes.
- (6) The number of wild animals in a wild animal menagerie may not exceed 10.

History: En. Sec. 4, Ch. 130, L. 1969; amd. Sec. 13, Ch. 417, L. 1977; R.C.M. 1947, 26-1208; amd. Sec. 5, Ch. 322, L. 1999; (5) and (6) En. Sec. 7, Ch. 322, L. 1999.

**87-4-805. Repealed. Sec. 8, Ch. 322, L. 1999.**

History: En. Sec. 5, Ch. 130, L. 1969; R.C.M. 1947, 26-1209.

**87-4-806. Inspection, permit revocation, and redemption of wildlife.** All roadside menageries, wild animal menageries, and zoos and all equipment used in connection with any roadside menagerie, wild animal menagerie, or zoo must be open to inspection at all reasonable hours. If upon inspection it is found that the roadside menagerie, wild animal menagerie, or zoo is not being operated in accordance with this part or with the department regulations, the director shall revoke the permit without right of renewal and shall redeem possession of all wildlife obtained by capture or unlawful propagation.

History: En. Sec. 6, Ch. 130, L. 1969; amd. Sec. 13, Ch. 417, L. 1977; R.C.M. 1947, 26-1210; amd. Sec. 6, Ch. 322, L. 1999.

**87-4-807. Enforcement and penalty.** (1) The provisions of this part shall be enforced by any warden or any other legally authorized officer. Any person violating the provisions of this part shall upon conviction be punished as provided in 87-1-102, and at the discretion of the court, the permit and all rights and privileges inherent therein may be forfeited.

(2) Any animals being kept in violation of any section of this part may be confiscated or ordered disposed of at the discretion of the director. The permittee may appeal to the commission within 20 days of the date of the order to confiscate, and the commission shall hold a hearing on such an appeal, and the decision of the commission shall be final.

History: En. Sec. 7, Ch. 130, L. 1969; amd. Sec. 5, Ch. 465, L. 1977; R.C.M. 1947, 26-1211.

**87-4-808. Fines, bonds, penalties, and fees.** Fines, bonds, or penalties, except those obtained by a justice's court, shall be administered and disposed of in accordance with the provisions of 87-1-601. Fees obtained under this part shall be deposited with the state treasurer and credited to the state special revenue fund, fish and game account.

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## SUB-CHAPTER 13 -- ROADSIE ZOO REGULATIONS

### 12.6.1301 RECORDS AND DISPLAY OF PERMIT

(1) A complete record and history of each game animal, game bird, and fur-bearing animal, as well as a monthly inventory, record of offspring birth details, disposition of animals, and other pertinent details as may be required, shall be kept in a permanent log book and made available upon request to any fish and game warden or duly commissioned officer.

(2) All permits issued under the provision of section 87-4-803, MCA, shall be framed and publicly displayed at roadside menageries covered by said permit. A copy of these roadside zoo regulations must be prominently displayed for public information. (History: Sec. 87-4-802 MCA; IMP, Secs. 87-4-802, 87-4-803 MCA; Eff. 12/31/72.)

### 12.6.1302 HOUSING

(1) All wild animals (which includes all wild mammals, birds, and reptiles, whether or not such animal was bred or reared in captivity) held in captivity at roadside menageries, shall be confined at all times in cages of such strength and type of construction that it will be impossible for said animals to escape, and at no time shall any such animals be chained or otherwise tethered to stakes, posts, trees, buildings, or other anchorage, or otherwise impeded from moving freely within the cage or enclosure.

(2) All such cages and enclosures shall be of sufficient size and height to give the animals so confined ample space for exercise and to avoid overcrowding or escape. Each cage or enclosure shall be provided with a weather-proof den, nest box, rest board, perch, or shelter, and such bedding as may be required for the comfort of the species of animals, reptiles, birds, etc., so held in captivity and to protect them against inclement weather. A suitable shield for protection against the hot rays of sun shall also be provided. Where the natural climate of the species of animal being held differs from the climate of the area where the menagerie is located, provisions must be made to adjust holding conditions to the natural habitat.

(3) An effective barrier, well-supported, shall be constructed around cages or enclosures on the side or sides where the public may approach them to safeguard the public and the animals from injury. Such cages and fencing shall be kept in good repair at all times, and gates and doors shall be padlocked. No nails or other sharp protrusions which might injure the animal are allowed within the cage.

(4) At least one wall the enclosure shall be constructed so as to provide a privacy screen and windbreak for the animals confined within the enclosure or cage. (History: 87-4-802, MCA; IMP, 87-4-802, MCA; Eff. 12/31/72.)

### 12.6.1303 FEEDING

(1) A regular daily feeding and watering schedule shall be maintained. The rations supplied should be adequate and varied, and so far as possible, consistent with the food which is ordinarily eaten by such animals in a wild state to maintain proper strength and healthy appearance. Food must be of good quality.

(2) Ample fresh water shall be available to cages or enclosures at all times. (History: 87-4-802, MCA; IMP, 87-4-802, MCA; Eff. 12/31/72.)

#### 12.6.304 TREATMENT AND SANITATION

(1) All animals retained at a roadside zoo shall be handled in a humane manner and kept free from parasites, sickness or disease, and when afflicted or unsightly shall be removed from public display by the owner, and immediately given professional medical attention, or be destroyed in a humane manner.

(2) All cages or other enclosures shall be cleaned at least once a day and said enclosures and their surroundings shall be kept in a sanitary and attractive condition, free from offensive odor.

(3) All animals with a propensity to fight or which are otherwise incompatible shall be kept segregated.

(History: 87-4-802, MCA; IMP, 87-4-802, MCA; Eff. 12/31/72; AMD, 1996 MAR p. 1839, Eff. 7/4/96.)

#### 12.6.1305 IDENTIFYING LABELS

(1) Each enclosure shall be labeled with the proper common name in English of the animal or animals therein confined for the information of the public. The letters on such labels shall be at least 1 inch in height.

(History: 87-4-802, MCA; IMP, 87-4-802, MCA; Eff. 12/31/72.)

#### 12.6.1306 STOCK OBTAINED LAWFULLY

(1) All animals retained at a roadside zoo or menagerie shall have been secured in a lawful manner. Evidence of such legal possession shall be kept on the premises for each animal maintained in such zoo or menagerie and shall be presented to any authorized officer upon demand. It shall be the purchaser's responsibility to obtain written verification that the individual disposing of any animals was legally entitled to make such disposition. Such verification shall be maintained with the other records and made available upon request.

(History: 87-4-802, 87-4-804, MCA; IMP, 87-4-802, 87-4-804, MCA; Eff. 12/31/72.)

#### 12.6.1307 DISPOSING OF WILDLIFE STOCK

(1) Those game animals, game birds, and fur-bearing animal captured or taken from the wild, wildlife on loan from the department, and any progeny of the above shall not be sold and may be exported or exchanged only by permit issued by the department.

(2) Those game animals, game birds, and fur-bearing animals lawfully obtained from a licensed game farm or fur farm within the state or lawfully obtained outside the state may be propagated, sold, exchanged, or donated only under authority of a game or fur farm permit issued by the department.

(History: 87-4-802, MCA; IMP, 87-4-802, 87-4-804, 87-4-805, MCA; Eff. 12/31/72.)

#### 12.5.1308 INSURANCE REQUIREMENTS

(1) No permit will be issued or renewed, nor will any transfer of permit be approved, unless and until the director is furnished satisfactory proof that the operation or proposed operation of the roadside zoo or menagerie under such permit is covered by policy contract of insurance issued by a reputable and financially responsible insurer, which will pay on behalf of such permittee as insured, all sums which such permittee shall become legally obligated to pay as damages because of bodily injury or property

damage caused any member of the public, while on the premises of such zoo or menagerie, by negligent operation or maintenance or caused by negligent care, confinement, or supervision of the birds or animals therein. Such policy contract of insurance shall be issued in policy limits of at least the following:

- (a) bodily injury - \$ 25,000 for each person and \$100,000 for each occurrence;
- (b) property damage liability - \$ 5,000 for each occurrence.

(History: Sec. 87-4-802 MCA; IMP, Sec. 87-4-802 MCA; Eff. 12/31/72.)

#### 12.6.1309 ENFORCEMENT

(1) Regulations contained in this sub-chapter may be enforced by any fish and game warden or other officer duly authorized by the state of Montana.

(History: Sec. 87-4-802 MCA; IMP, Secs. 87-4-802, 87-4-807 MCA; Eff. 12/31/72.)

**APPENDIX B**

**MONTANA DEPARTMENT OF FISH, WILDLIFE & PARKS  
MEMORANDUM FROM MICHAEL MADEL TO DANIEL VINCENT  
JUNE 14, 1991**

## MONTANA DEPARTMENT OF FISH, WILDLIFE &amp; PARKS

Office Memorandum

Date: June 14, 1991

To: Daniel Vincent

From: Michael Madel

Subject: Electric fence system evaluation for the proposed  
Great Bear Adventure Park, Coram, MT.

An assessment team consisting of Jim Cross, Ed Kelly, and myself toured the Great Bear Adventure Park (GBAP) facility on 6/12/91. The primary objective was to evaluate the potential effectiveness of a recently constructed combination woven/electric perimeter fence for containing domesticated black bears as well as deterring access into the compound by wild resident bear. This evaluation was directly related to potential impacts on human safety in and around park grounds.

Upon investigation of the facility, the perimeter fence (see attachment) was assessed as being inadequate as an effective barrier to hold domestic bears within park grounds and in keeping wild black or grizzly bears out. This evaluation is based on six years of testing and using electric fence systems as a method of bear deterrent in the R4 Rocky Mountain Front area. It may not necessarily depict a situation of containment of tame bear which is likely more severe considering that 6 to 8 bears will continue to test any weak links in the fence system 24 hours a day.

Summarized below are technical concerns regarding current fence system construction. Ideas were discussed and corrections were made by owner R. Kilpatrick during our visit 6/12 including installation of a separate grounding for the lightening diverter, connection of the entire page wire mesh to negative ground of energizer, and electrifying gate panels.

1. The lower inside electric wire and the only outside wire are positioned too high off the ground level (average 18 to 24 inches). A cub/yearling bear could move under this wire and climb over fence. Considering the irregular terrain this wire should range 6 to 12" off the ground.

2. The distance between the electric wires both inside and outside the page wire barrier is too great (ave. 27 inches). If a bear slips past the electric lines there is no deterrent to keep it from climbing over the fence. All electric positive lines should be extended 8 to 12" from the page wire which is



then connected to the earth system, assuring a true electrical charge be delivered to an animal when attempting to climb through the wires, even when dry soil conditions persist.

3. The top 3 barbed wire lines extending 24" off the 6 foot page wire mesh have no deterrent value once a bear climbs the fence. The top and third lines should either be replaced with high tensile electric wires on insulators, or these same two barbed wires should be placed on insulators and electrified. This would then complete the positive/negative circuit and act as a final conditioning effect if a bear makes it around the lower electric lines, either inside or out, which will eventually happen.

4. Noticeable gaps between the bottom of the page wire mesh and ground level should be staked with rebar and wired.

5. In several locations along fence perimeter, trees of sufficient diameter for climbing are within a "bears reach" of the fence. Any trees with overhanging or touching limbs should be removed.

6. Electric wire lines should be kept as tight as possible with in-line tighteners. It has been shown that tight wires are more effective because bears must force their way by them, allowing wires to penetrate dense fur layers and contact the skin.

7. The probability that resident wild black and grizzly bear are attracted to the park facility will likely increase with time as bear odors and certain unavoidable food smells become concentrated within the enclosure. A single outside electric line may be inadequate in deterring bears from digging under the page wire fence. A simple outside secondary perimeter fence containing at least two guard dogs (in a runway between the two fences; a 4-strand electric fence on the outside) would be an effective noise and encounter deterrent for approaching native bears, as well as park animals on the interior.

8. The operating fence energizer was tested at an average electrical pulse output of 6400 volts on 110a hookup. This should be effective in controlling bears. In the event of power failure or other unplanned problems, a 12 volt fence energizer should be available with a switch-over mechanism so as to maintain continuous power to fence system.

Note: Other bear park related factors discussed during the investigation that are not associated with the perimeter control fence will be identified in the Environmental Assessment process and discussed in public forum.

cc: J. Cross G. Taylor  
E. Kelly M. Aderhold  
K. Cool

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## **APPENDIX C**

### **PRIVATE PROPERTY ASSESSMENT ACT CHECKLIST**

## **APPENDIX C**

### **PRIVATE PROPERTY ASSESSMENT ACT CHECKLIST**

The 54<sup>th</sup> Legislature enacted the Private Property Assessment Act, Chapter 462, Laws of Montana (1995). The intent of the legislation is to establish an orderly and consistent process by which state agencies evaluate their proposed actions under the "Takings Clauses" of the United States and Montana Constitutions. The Takings Clause of the Fifth Amendment of the United States Constitution provides: "nor shall private property be taken for public use, without just compensation." Similarly, Article II, Section 29 of the Montana Constitution provides: "Private property shall not be taken or damaged for public use without just compensation."

The Private Property Assessment Act applies to proposed agency actions pertaining to land or water management or to some other environmental matter that, if adopted and enforced without compensation, would constitute a deprivation of private property in violation of the United States or Montana Constitutions.

The Montana State Attorney General's Office has developed guidelines for use by state agency to assess the impact of a proposed agency action on private property. The assessment process includes a careful review of all issues identified in the Attorney General's guidance document (Montana Department of Justice 1997). If the use of the guidelines and checklist indicates that a proposed agency action has taking or damaging implications, the agency must prepare an impact assessment in accordance with Section 5 of the Private Property Assessment Act. For the purposes of this EA, the questions on the following checklist refer to the following Required Stipulations:

1. Under Alternative C (only), no brown bears would be allowed.
2. All bears must be sterilized.
3. All bears must be tattooed with a unique code.
4. Food storage must be in odor-proof containers as per USDA APHIS rules.
5. A veterinary-care plan must be developed and implemented, including descriptions of specific vaccination schedules.
6. No road-killed ungulates may be used in the feeding program.

7. All provisions of the roadside zoo and menagerie regulations apply, except for the caging requirements (ARM 12.6.1302).
8. Fencing requirements:
  - a. backup fence energizer, 12-volt system, deep cycle battery.
  - b. Warning signs adequate to protect public if electrical fence system approached from outside of park.
9. Additional fencing requirements (in 1991 these were identified as recommendations:
  - a. Enhance existing fence per recommendations (as per memo from Mike Madel of 6/14/91; see Appendix B), or
  - b. Develop outside perimeter fence and use trained dogs to minimize or prevent bear escapement or entry and human entry or injury.
10. Permit review – annually with revocation rights.
11. Escaped bears – owner liable for damage and/or expenses incurred in capturing escaped bears.

**In addition to the previously required stipulations:**

12. Report ingress of any wild bears or egress of captive bears to the Montana DWP immediately.  
The report must contain the probably reason why or how ingress/egress occurred.
13. Remove bear fecal matter on a daily basis (consistent with ARMs).

## PRIVATE PROPERTY ASSESSMENT ACT CHECKLIST

### DOES THE PROPOSED AGENCY ACTION HAVE TAKINGS IMPLICATIONS UNDER THE PRIVATE PROPERTY ASSESSMENT ACT?

YES      NO

- |              |     |  |
|--------------|-----|--|
| <u>  X  </u> | 1.  | Does the action pertain to land or water management or environmental regulation affecting private real property or water rights?   |
| <u>  X  </u> | 2.  | Does the action result in either a permanent or indefinite physical occupation of private property?  |
| <u>  X  </u> | 3.  | Does the action deprive the owner of all economically viable uses of the property?   |
| <u>  X  </u> | 4.  | Does the action deny a fundamental attribute of ownership?   |
| <u>  X  </u> | 5.  | Does the action require a property owner to dedicate a portion of property or to grant an easement? [If the answer is <b>NO</b> , skip questions 5a and 5b and continue with question 6.]                                |
| X            | 5a. | Is there a reasonable, specific connection between the government requirement and legitimate state interests?  |
| X            | 5b. | Is the government requirement roughly proportional to the impact of the proposed use of the property?  |
| <u>  X  </u> | 6.  | Does the action have a severe impact on the value of the property?   |
| <u>  X  </u> | 7.  | Does the action damage the property by causing some physical disturbance with respect to the property in excess of that sustained by the public generally? [If the answer is <b>NO</b> , do not answer questions 7a-7c.] |
| <u>  X  </u> | 7a. | Is the impact of government action direct, peculiar, and significant?  |
| <u>  X  </u> | 7b. | Has government action resulted in the property becoming practically inaccessible, waterlogged, or flooded?   |
| <u>  X  </u> | 7c. | Has government action diminished property values by more than 30% and necessitated the physical taking of adjacent property or property across a public way from the property in question?                               |

Taking or damaging implications exist if **YES** is checked in response to question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b, 7c; or if **NO** is checked in response to questions 5a or 5b.

If taking or damaging implications exist, the agency must comply with § 5 of the Private Property Assessment Act, to include the preparation of a taking or damaging impact assessment. Normally, the preparation of an impact assessment will require consultation with agency legal staff.

## **APPENDIX D**

### **KILPATRICK COMMENT ON INTERNAL DRAFT ENVIRONMENTAL ASSESSMENT**

**(Prior to release of the Public Draft EA)**

-----Original Message-----

From: Feldner, Tim

Sent: Monday, April 14, 2003 12:00 PM

To: 'bearpark@cyberport.net'

Cc: Olson, Bonnie

Subject: RE: EA Supplement

Mr. Kilpatrick,

Because I am acting in my capacity as the Fish, Wildlife and Parks, Commercial Wildlife Permitting Manager and protected by law by § 2-9-305 (2) of the Mont. Code Ann., I interpret your April 13, 2003 message as stopping short of threatening personal consequences to me. Please be advised that I stand ready to fully co-operate with your desire to provide comments to the Supplemental EA I sent you on Friday April 11, 2003. Although you delayed submitting you application for a month and have now had the Supplemental EA for more than 2 days, you are requesting an extension until April, 18, 2003. Due to the expedited time schedule, I am only at liberty to grant you an extension until close of business, Wednesday, April 16, 2003 within which to provide your comments to the Supplemental EA. In other words, I will consider all your comments on the Supplemental EA which are provided to me by 5:00pm Wednesday April 16, 2003. I would provide a courier to pick up your comments if you do not wish to email them to me. If you do email your comments, I will immediately acknowledge their receipt by me.

-----Original Message-----

From: bearpark@cyberport.net [mailto:bearpark@cyberport.net]

Sent: Sunday, April 13, 2003 8:13 AM

To: Feldner, Tim

Subject: EA Supplement

Morning Mr. Feldner,,, Let me begin by noticing you that the internal draft is riddled with innuendo, speculation, fallacies and fabrications. I will not allow this document to be submitted to the public, and if it is there will be a Liable suit immediately. I am currently rebutting the whole document which will take some time. Within the document you make reference again to your time line and the possibility of making this document available to the public Monday April 14, or Tuesday April 15. Do not make this document public as this is formal NOTICE to you, in your personal and private capacity that you will be

Liabe. My rebuttal and corrections will be in your possession no latter than Friday April 18 at 5:00 pm or shortly there after. If this is not acceptable please inform me as such, and we can then look forward to settling this matter if Federal District Court. As you have stated within the document, the scoping meeting was not a requirement, and therefore you also stated that the next public meeting may not be necessary; I agree. As you have had many individuals working on what you just presented, you must allow me a respectable amount of time to address the fabricated issues within it. Please take NOTICE!!!

Sincerely,  
Russell Arnold Kilpatrick